



Bryn Mawr  
College  
Library







Digitized by the Internet Archive  
in 2011 with funding from  
LYRASIS Members and Sloan Foundation



116 70 (1) 37  
C. 116 70

ANNUAL REPORT  
OF  
THE PRESIDENT  
OF  
BRYN MAWR COLLEGE,  
1894-95.

---

PHILADELPHIA :  
ALFRED J. FERRIS, PRINTER, 29 NORTH SEVENTH STREET,  
1896.

THE BAKER DOUGLASS LIBRARY  
OF BAKER DOUGLASS

## BOARD OF TRUSTEES.

PHILIP C. GARRETT,  
*President.*

HENRY TATNALL,  
*Treasurer.*

EDWARD BETTLE, JR.,  
*Secretary.*

JAMES CAREY THOMAS, Baltimore.	ALBERT K. SMILEY, Lake Mohonk, N. Y.
JAMES WHITALL, Philadelphia.	PHILIP C. GARRETT, Philadelphia.
JOHN B. GARRETT, Rosemont.	EDWARD BETTLE, JR., Philadelphia.
DAVID SCULL, Philadelphia.	HOWARD COMFORT, Philadelphia.
CHARLES HARTSHORNE, Philadelphia.	JUSTUS C. STRAWBRIDGE, Philadelphia.
WILLIAM R. THURSTON, New York.	THOMAS SCATTERGOOD, Philadelphia.
HENRY TATNALL, Philadelphia.	

## EXECUTIVE COMMITTEE.

HOWARD COMFORT,	CHARLES HARTSHORNE,
JAMES WHITALL,	JAMES CAREY THOMAS,
EDWARD BETTLE, JR.	

## COMMITTEE ON BUILDINGS AND GROUNDS.

DAVID SCULL,	JAMES WHITALL,
JUSTUS C. STRAWBRIDGE,	THOMAS SCATTERGOOD.

## FINANCE COMMITTEE.

JOHN B. GARRETT,	THOMAS SCATTERGOOD,
JUSTUS C. STRAWBRIDGE.	

## LIBRARY COMMITTEE.

EDWARD BETTLE, JR.,	HOWARD COMFORT,
DAVID SCULL.	

## ACADEMIC APPOINTMENTS.

M. CAREY THOMAS, PH.D., *President of the College and Professor of English.*

A.B., Cornell University, 1877; studied at the Johns Hopkins University, 1877-78; University of Leipsic, 1879-82; Ph.D., University of Zürich, 1882; Sorbonne and the Collège de France, 1883; Dean of the Faculty of Bryn Mawr College and Professor of English, 1885-94.

CHARLOTTE ANGAS SCOTT, D.Sc., *Professor of Mathematics.*

Lincoln, England. Graduate in Honors, Girton College, University of Cambridge, England, 1880; B.Sc., University of London, 1882; Lecturer on Mathematics in Girton College, 1880-84; lectured in connection with Newnham College, University of Cambridge, England, 1880-83; D.Sc., University of London, 1885.

EDWARD H. KEISER, PH.D., *Professor of Chemistry.*

S.B., Swarthmore College, 1880; Assistant in Chemistry, Swarthmore College, 1880-81; S.M., Swarthmore College, 1881; Fellow in Chemistry, Johns Hopkins University, 1882-84; Ph.D., Johns Hopkins University, 1884; Student at the Royal School of Mines, Freiberg, Saxony, 1884; Assistant in Chemistry, Johns Hopkins University, 1884-85.

HERMANN COLLITZ, PH.D., *Associate Professor of Comparative Philology and German.*

Bleckede, Hanover, Germany. University of Göttingen, 1875-78; University of Berlin, 1878-81; Ph.D., University of Göttingen, 1878; Privatdocent in the University of Halle, 1885-86.

JAMES HARKNESS, A.M. (*Cambridge and London*), *Associate Professor of Mathematics.*

Derby, England. Major Scholar, Trinity College, University of Cambridge, England, 1882; Graduate in Honors (8th Wrangler) in the Cambridge Mathematical Tripos, 1885; Mathematical Exhibitioner, London University Intermediate Arts Examination, 1885; Mathematical Scholar, London University B.A. Examination, 1887.

HERBERT WEIR SMYTH, PH.D., *Professor of Greek.*

A.B., Swarthmore College, 1876, and Harvard University, 1878; University of Leipsic, 1879-81; University of Göttingen, 1881-83; Instructor in Classics and Sanskrit, Williams College, 1883-85; Ph.D., University of Göttingen, 1884; Fellow by Courtesy and Lecturer on Greek, Johns Hopkins University, 1885-87; Reader in Greek Literature, Johns Hopkins University, 1887-88.

MARY GWINN, PH.D., *Associate Professor of English.*

Studied at the University of Leipsic, 1879-82; University of Zürich, 1882; Sorbonne and the Collège de France, 1883; Fellow in English, Bryn Mawr College, 1885-87, and graduate student, 1887-88; Ph.D., Bryn Mawr College, 1888.

CHARLES MCLEAN ANDREWS, PH.D., *Associate Professor of History.*

A.B., Trinity College, 1884; Fellow in Johns Hopkins University, 1888-89; Ph.D., Johns Hopkins University, 1889.

GONZALEZ LODGE, PH.D., *Professor of Latin.*

A.B., Johns Hopkins University, 1883; Graduate Scholar and Fellow, Johns Hopkins University, 1883-86; Ph.D., Johns Hopkins University, 1886; Professor of Greek, Davidson College, 1886-88; American School of Classical Studies, Athens, 1888-89; University of Bonn, 1889.

GEORGE A. BARTON, PH.D., *Associate in Biblical Literature and Semitic Languages.*

A.B., Haverford College, 1882, and A.M., 1885; A.M., Harvard University, 1890; Ph.D., Harvard University, 1891.

JOSEPH AUGUSTE FONTAINE, PH.D., *Professor of Romance Languages.*

College of Sion, Naney, France, 1879; Paris, 1880-81; Johns Hopkins University, 1882-86; Ph.D., Johns Hopkins University, 1886; Collège de France, Sorbonne, Ecole des Hautes Etudes, Ecole des Chartes, University of Bonn, 1886-87; Instructor, University of Nebraska, 1887-89; Professor of Modern Languages, University of Mississippi, 1889-91.

ARTHUR STANLEY MACKENZIE, PH.D., *Associate Professor of Physics.*

A.B., Dalhousie University, 1885; Tutor in Mathematics, Dalhousie University, 1887-89; Fellow, Johns Hopkins University, 1890-91; Ph.D., Johns Hopkins University, 1894.

JAMES DOUGLAS BRUCE, PH.D., *Associate in English Philology.*

A.M., University of Virginia, 1883; University of Berlin, 1886-88; University of Strasburg, 1888; Johns Hopkins University, 1889-90; Professor of Modern Languages, Centre College, 1890-91; Ph.D., Johns Hopkins University, 1894.

THOMAS HUNT MORGAN, PH.D., *Professor of Biology.*

B.S., State College, Kentucky, 1886, and M.S., 1888; Graduate Scholar, Johns Hopkins University, 1888-89; Fellow in Biology, Johns Hopkins University, 1889-90; Ph.D., Johns Hopkins University, 1890; Adam T. Bruce Fellow, Johns Hopkins University, 1890-91.

JOSEPH W. WARREN, M.D., *Associate Professor of Physiology.*

A.B., Harvard College, 1871; University of Berlin, 1871-72; University of Leipsic, 1872-73; University of Bonn, 1873-79; M.D., University of Bonn, 1880; Assistant and Instructor in Physiology, Harvard Medical School, 1881-91; Lecturer in Medical Department of the University of the City of New York, 1885-86; Lecturer in Physiology, University of Michigan, 1889.

DICKINSON SERGEANT MILLER, PH.D., *Associate in Philosophy.*

University of Pennsylvania, 1885-88; Fellow in Philosophy, Clark University, 1889-90; Morgan Fellow, Harvard University, 1890-91; Walker Fellow, Harvard University, 1891-92; A.B. and A.M., Harvard University, 1892; University of Berlin, 1892-93; Ph.D., University of Halle, 1893.

ELMER P. KOHLER, PH.D., *Associate in Chemistry.*

A.B., Muhlenberg College, 1886, and A.M., 1889; Johns Hopkins University, 1889-91; Fellow in Chemistry, Johns Hopkins University, 1891-92; Ph.D., Johns Hopkins University, 1892.

EDGAR BUCKINGHAM, PH.D., *Associate in Physics.*

A.B., Harvard University, 1887; Assistant in Physics, Harvard University, 1888-89; Assistant in Physics, University of Strasburg, 1889-90; University of Leipsic, 1890-91; Assistant in Physics, Harvard University, 1891-92; Tyndall Scholar of Harvard University, University of Leipsic, 1892-93; Ph.D., University of Leipsic, 1893.

LINDLEY MILLER KEASBEY, PH.D., R.P.D., *Associate Professor of Political Science.*

A.B., Harvard University, 1888; A.M., Columbia College, 1889; Ph.D., Columbia College, 1890; University of Berlin, 1890-91; University of Strasburg, 1891-92; *Rerum Politicarum Doctor*, University of Strasburg, 1892; Assistant in Economics, Columbia College, and Lecturer on Political Science, Barnard College, 1892; Professor of History, Economics and Political Science, State University of Colorado, 1892-94.

MORTIMER LAMSON EARLE, PH.D., *Associate Professor of Greek and Latin.*

A.B., Columbia College, 1886, A.M., 1887, and Ph.D., 1889; American School of Classical Studies, Athens, 1887-88; in charge of excavations at Sicyon, December, 1887, and July and August, 1891; studied at Bonn, 1887-88; studied at Berlin, 1889; Assistant in Greek, Columbia College, 1886-89; Acting Assistant in Latin, Columbia College, 1886-87; Instructor in Greek, Barnard College, 1889-95; Lecturer in Greek, Columbia College, 1894-95.

PAUL ELMER MORE, A.M., *Associate in Sanskrit and Classical Literature.*

A.B., Washington University, 1887, and A.M., 1891; A.M., Harvard University, 1893; Assistant in Indo-Iranian Languages, Harvard University, 1894-95.

ALFRED HODDER, *Lecturer in English.*

Graduate School, Harvard University, 1890-91; Morgan Fellow, Harvard University, 1891-92; University of Freiburg, University of Berlin, 1892-93.

RICHARD NORTON, A.B., *Lecturer in the History of Art.*

A.B., Harvard University, 1892; American School of Classical Studies, Athens, 1892-94; University of Munich, 1894-95.

ROSE CHAMBERLIN, *Reader in German.*

Great Yarmouth, England. Graduate in Honors, Newnham College, University of Cambridge, England, 1886 (Medieval and Modern Languages Tripos, First Class).

ABBY KIRK, A.B., *Reader in English.*

A.B., Bryn Mawr College, 1892.

HARRIET RANDOLPH, PH.D., *Demonstrator in Biology and Reader in Botany*.  
A.B., Bryn Mawr College, 1889; Fellow in Biology, Bryn Mawr College, 1889-90; University of Zürich, 1890-92; Ph.D., University of Zürich, 1892.

FLORENCE V. KEYS, A.B., *Reader in English*.

A.B., University of Toronto, 1891; Fellow in Greek, Bryn Mawr College, 1891-92; Fellow in English, Bryn Mawr College, 1892-93; Examiner in English in the University of Toronto, 1894-95.

THERÈSE F. COLIN, A.M., *Reader in Romance Languages*.

Diplômée et agrégée, Collège de Neuchâtel, 1875; A.M., Leland Stanford, Jr. University, 1893; Muséum d'Histoire Naturelle, Paris, 1883-85; University of the City of New York, 1887-88; Fellow in Romance Languages, Bryn Mawr College, 1893-94; Student in Romance Philology and Literature, Sorbonne, Collège de France, Ecole des Hautes Etudes, Ecole des Chartes, 1895.

FLORENCE BASCOM, PH.D., *Reader in Geology*.

A.B., University of Wisconsin, 1882, B.Sc., 1884, and A.M., 1887; Johns Hopkins University, 1891-93; Ph.D., Johns Hopkins University, 1893; Assistant in Geology and Instructor in Petrography, Ohio State University, 1893-95.

ALICE BERTHA FOSTER, M.D., *Director of the Gymnasium*.

Graduate of Dr. Sargent's Training School for Teachers, 1886; M.D., Medical School of University of Buffalo, 1891; Anderson Summer School, Chautauqua, 1892; Studied in Baron Posse's Normal Class in Practice, Boston, and in Harvard Summer School of Phys. Ed., 1886; Director Buffalo Sanatory Gymnasium of the Women's Educational and Industrial Union, Buffalo, 1886-92; Assistant Teacher, Harvard Summer School of Phys. Ed., 1889-90; Tutor in Phys. Culture (in charge of the Women's Work), University of Chicago, 1892-94.

ELIZABETH BATES, *Assistant in the Gymnasium*.

Graduate of Boston Normal School of Gymnastics, 1893.

MARY SHERWOOD, M.D., *Lecturer on Hygiene and Physician of the College*.

A.B., Vassar College, 1883; M.D., University of Zürich, 1890; Lecturer on Pathology at the Woman's Medical College of Philadelphia, 1891-96.

HENRIETTA R. PALMER, A.B., *Librarian*.

School of Library Economy, Columbia College, 1887-89; Acting Librarian, Bryn Mawr College, 1890-91; A.B., Bryn Mawr College, 1893; Associate Librarian, Bryn Mawr College, 1893-95.

JANE BOWNE HAINES, A.M., *Associate Librarian*.

A.B., Bryn Mawr College, 1891, and A.M., 1892; Fellow in History, Bryn Mawr College, 1892-93.

BESSIE BAKER, B.S., *Assistant Librarian*.

B.S., Purdue University, 1886; studied in the New York State Library School, 1891-92.

FREDERICKA M. KERR, *Bursar*.

MADELINE VAUGHAN ABBOTT, A.B., *Secretary*.

A.B., Bryn Mawr College, 1893; Secretary to the Dean, Bryn Mawr College, 1893-94.

ISABEL MADISON, B.Sc., *Secretary to the President*.

B.Sc., University of London, 1893; Graduate Student in Mathematics, Bryn Mawr College, 1892-93, and Fellow in Mathematics, 1893-94; Holder of the Mary E. Garrett European Fellowship and Student in Mathematics, University of Göttingen, 1894-95.

MARY HARRIS, A.B., *Recording Secretary*.

A.B., Bryn Mawr College, 1894.





## ELEVENTH ANNUAL REPORT.

*To the Board of Trustees:*

The President of the College respectfully submits the following report for the eleventh academic year, extending from September 1st, 1894, to August 31st, 1895.

All other events of the past year are overshadowed by the profound loss that befell the College on the 2nd of January in the sudden death of Dr. James E. Rhoads, who had been President of the College from its opening in 1885 until August 31st, 1894. As stated in his last president's report for the year 1893-94, Dr. Rhoads' resignation on the ground of ill health had been reluctantly accepted by the Trustees, and was to take effect at the beginning of the year covered by this report. Dr. Rhoads, however, had remained in very close relations with the College. As Professor of Christian Ethics he retained his seat in the Academic Council and in the Faculty, and as President of the Board of Trustees he filled the position he had held since the death, in 1891, of the first President of the Board, Francis T. King. There was, therefore, at the beginning of the academic year every reason to believe that the College would continue to enjoy the benefit of his presence and counsel for many years to come, and the grief caused by his unexpected death was correspondingly great.

A memorial meeting attended by the Trustees and Faculty, the whole body of undergraduate and graduate students, and a large number of the alumnae and friends of the College, was held on the 7th of January in Taylor Hall, to give formal and permanent expression to this sense of loss and to the love and honor in which the memory of Dr. Rhoads was held by all connected with the College. Addresses were delivered by Philip C. Garrett, of Philadelphia, one of the original Trustees appointed by the Founder, and a member of the Executive

Committee of the Trustees ; Dr. James C. Thomas, of Baltimore, also one of the original Trustees and a member of the Executive Committee; Professor Edward Washburn Hopkins, the senior member of the Classical Faculty; Professor Edward H. Keiser, the senior member of the Scientific Faculty; Dr. Herbert Weir Smyth, Professor of Greek; Professor J. Rendel Harris, of Cambridge University, England, who held the post of Lecturer in Biblical Literature during two years of Dr. Rhoads' presidency; Miss Edith Sampson, of Philadelphia, President of the Alumnæ Association of Bryn Mawr College; Miss Susan Grimes Walker, President of the Students' Association for Self-Government; and by the President of the College. These addresses were published afterwards in pamphlet form. In the appendix to this report will be found the memorial resolutions adopted by the Board of Trustees, by the Faculty, and by the Alumnæ Association of Bryn Mawr College.

Professor Edward Washburn Hopkins, who had held the chair of Greek, Sanskrit and Comparative Philology since the opening of the College, as Associate Professor till the year 1891, and afterwards as full Professor, resigned his position at the close of the past year in order to accept the professorship of Sanskrit in the University of Yale left vacant by the death of the eminent Sanskrit scholar, Professor William T. Whitney. The Board passed resolutions expressing their cordial appreciation of Dr. Hopkins' ten years of faithful and efficient service and their satisfaction that in his new post he would be able to devote himself more exclusively to his chosen field of work, Sanskrit, than was possible in Bryn Mawr College, where the teaching of Greek was combined with that of Sanskrit. The resignation of Mr. Robert G. Bury, who held a one-year appointment as Lecturer in Greek and

Latin Literature, was accepted, and the subject of the future organisation of the classical department received the careful consideration of the President and the Trustees. It was decided that in the new appointments special regard should be given to the strengthening of the departments of Latin and Greek in order that the splendid facilities offered by the newly-acquired Sauppe classical library might be utilised and the growing demand of the students for more extended teaching in the classics fully met. The department of Comparative Philology was assigned to Dr. Hermann Collitz, whose investigations in Comparative Indo-European Philology have won him universal recognition ; and Dr. Collitz's title was changed from that of Associate Professor of German and Teutonic Philology to that of Associate Professor of Comparative Philology and German. Professor Herbert Weir Smyth retained his former position as head of the graduate Greek department, succeeding Dr. Hopkins as Senior Professor of the classical department and head of the undergraduate department of Greek.

After a minute survey of the whole field and after full consultation between the President and various eminent classical professors, the Trustees elected Dr. Mortimer Lamson Earle Associate Professor of Greek and Latin and Mr. Paul Elmer More Associate in Sanskrit and Classical Literature.

Dr. Earle had received in 1886 the degree of A.B., in 1887 that of A.M. and in 1889 that of Ph.D. of Columbia College, had studied between 1887 and 1889 in the University of Bonn, and the American School of Classical Studies at Athens, spending the year 1887-88 in Athens, and had been in charge of the excavations at Sicyon in December, 1887, and again in July and August, 1892.

He had held the post of Assistant in Greek in Columbia College during the time he was not abroad in the years 1886-89, and also that of Acting Assistant in Latin in Columbia College in the year 1886-87. After his return Dr. Earle had been instructor in Greek at Barnard College from 1889 to 1895, conducting during this time all the advanced Greek classes, and in 1894-95 had been Lecturer in Greek in Columbia College.

Mr. More received in 1887 the degree of A.B., and in 1891 that of A.M., of Washington University, and in 1893, after two years of graduate study, the degree of A.M. of Harvard University. During the year 1893-94 he had held the post of Assistant in Indo-Iranian Languages, and had helped Professor Lanman in conducting graduate classes in Sanskrit in Harvard University. This post he resigned to accept the offer of the Trustees. Throughout the three years of his stay at Harvard Mr. More had spent a large part of his time in graduate work in Greek, and he had already given evidence in his published writings of his power to embody Oriental philosophy in excellent literary form. It was therefore decided to put into his hands not only the work in Sanskrit, but also the courses in Homer and Horace, and the lectures on Greek and Latin literature.

In order to complete the organisation of the classical department there should be appointed in the near future another associate or associate professor in Latin. The demand for post-major courses in Latin and Greek is much greater than we can at present supply. Twenty-five hours of continuous graded work in Greek, including five hours of elementary Greek, and nineteen hours of continuous graded work in Latin, are offered weekly each year, the authors chosen for the post major and the graduate courses being in

all cases varied so that the same students may elect the work in two consecutive years and yet the courses offered are by no means sufficient. The selection of a suitable candidate whose especial line of classical work would supplement and extend rather than duplicate that of the classical scholars already included in our faculty is however a matter of some difficulty.

The classical department was much strengthened by the vote of the Trustees creating a lectureship in the history of art for the coming year, and by the announcement of an elective course in Greek and Roman art open to all students, a special course in Greek archæology open only to students of Greek and Latin, and of graduate courses in archæology. The Trustees elected to this lectureship Mr. Richard Norton, who, as the son of Professor Charles Eliot Norton, bears a name honorably associated both in this country and abroad with art and liberal culture. Mr. Norton, after receiving in 1892 the degree of A.B. of Harvard University, had spent three years in Europe, studying for two years in the American School of Classical Studies at Athens, and for one year under Professor Furtwängler in the University of Munich. There will be offered by Mr. Norton, in addition to the courses in classical art and archæology, a course either in Italian art, or in the history of painting.

The Board voted the sum of \$500 for the purchase of books and photographs for the department of art and archæology, a sum further increased by "a gift" to the President of \$1300 for the same purpose, and by the vote of the Undergraduate Association of Students of Bryn Mawr College to apply the fund raised by the Association in memory of Dr. Rhoads to the purchase of books in art selected by Mr. Norton.

A friend of the College has placed at the disposal of Mr. Norton a very large collection of Braun carbon photographs and an extensive collection of other photographs, including almost complete sets of French and English architectural monuments, and photographs of Egyptian and Japanese buildings and works of art. The new department will accordingly open with an equipment of photographs and books sufficient for its present needs; but in order to teach classical art efficiently there will be required, almost immediately, a collection of casts similar to, even if at first much smaller than, the newly-acquired collection of Cornell University or the admirable Princeton collection.

For some time past there had existed among the students of science, and more especially among the students of chemistry, now in the college, a very general desire to study geology. A readership in geology was accordingly founded by the Trustees for the year 1895-96, and three rooms on the fourth floor of Dalton Hall, a professor's room, a general laboratory and lecture room, and an advanced laboratory, were appropriated to this new department. This readership was most satisfactorily filled by the appointment of Dr. Florence Bascom, who in 1882 had received the degrees of A.B. and L.B., in 1884 that of B.Sc., and in 1887 that of A.M. of the University of Wisconsin, had held from 1889 to 1891 the professorship of natural science in Rockford College, had from 1891 to 1893 studied geology in the graduate department of the Johns Hopkins University, and in 1893 had received the degree of Doctor of Philosophy,—a degree never bestowed as yet by that university on any other woman. From 1893 to 1895 Dr. Bascom had held the post of Assistant in Geology and Instructor in Petrography in the Ohio State University, a post which she resigned at a considerable financial sacrifice on

account of the opportunities for original research afforded by the few hours, the advanced character of the teaching required, and the admirable geological formation surrounding Bryn Mawr College.

The large number of students in English, and more especially in the graduate English courses, made it necessary to establish a lectureship in English literature, and Mr. Alfred Hodder was appointed to the post. After being admitted to the bar of Colorado, Mr. Hodder had studied in the graduate school of Harvard University in 1890-91, had held the Morgan Fellowship in Harvard University in 1891-92, and in 1892-93 had studied abroad in Freiburg and Berlin.

In the general course in required philosophy a rearrangement of the work for the following year was necessitated by the death of Dr. Rhoads, who had held the professorship of Christian ethics, and Dr. Barton, Associate in Semitic Languages and Biblical Literature, was asked by the Trustees to deliver the lectures on Christian ethics hitherto delivered by Dr. Rhoads.

A complete list of the appointments and promotions in the faculty, as well as a list of the appointments in the staff of instructors, demonstrators, and other officers, will be found in the appendix to this report. With the exceptions already noted of Dr. Hopkins and Mr. Bury, and with the exception of Dr. Ross Granville Harrison, who during Dr. Morgan's year of absence in Europe filled the vacant post in morphology with marked success, all the members of the faculty for 1894-95 will remain at the College during 1895-96. Of the readers, also, all but two were reappointed. Dr. Frederick M. Page resigned the readership in Italian and Spanish, and Miss Phœbe A. B. Sheavyn resigned the readership in English to accept the English fellowship. The reorganisation of the

Italian and Spanish courses and of the department of Romance Philology received careful consideration, and pending a final adjustment the appointment of a reader in Italian for the next academic year was authorised.

Miss Florence E. Peirce, who for nine years, including one year's leave of absence in Europe in 1890-91, had served the College faithfully and efficiently as librarian, resigned her post in June, to the sincere regret of all connected with the College. It is largely due to her unremitting attention that the library is in its present serviceable condition, completely available on account of its thorough system of card catalogues, and, although used constantly by students, who have access to the shelves from 7 a.m. to 10 p.m., unimpaired by serious losses. Henrietta R. Palmer, Bachelor of Arts of Bryn Mawr College, a graduate of the School of Library Economy of Columbia College, and Associate Librarian of Bryn Mawr College in the years 1893-95, was appointed Librarian, and Jane Bowne Haines, Bachelor of Arts and Master of Arts of Bryn Mawr College, and Fellow in History for the year 1892-93, was appointed Associate Librarian.

Although it is a matter for sincere congratulation that two new subjects are to be added to our college curriculum next year, yet there are two other departments, as yet unrepresented, that claim the careful consideration of the Trustees. Our department of philosophy is seriously crippled by the lack of laboratory teaching in physiological psychology, and the course in advanced psychology given last year suffered materially both in interest and completeness from the want of laboratory experiments. Two separate attempts have been made at different times to supply this need: in the two academic years from 1887 to 1889 Dr. James McKeen Cattell,



now of Columbia College, delivered lectures on physiological psychology, and in 1890, courses in physiological psychology were organised by Dr. Jacques Loeb, Associate in Biology, at the request of the students, who have always taken a keen interest in this line of work. Some provision for the teaching of physiological psychology, whether by the foundation of a lectureship or of an associateship, should, if possible, be made during the next academic year.

During the past year my attention has also been called in a very especial manner to the subject of pedagogy, or the teaching teachers how to teach, as a branch of the college or university curriculum, and more especially of the college or university to which is attached a large graduate school. Unexpectedly opportunities have presented themselves of discussing the present position of the science of education with foreign as well as American scholars, and of examining some part of the voluminous new pedagogical literature, and the working of some of the best-known of the present normal schools. These investigations lead irresistibly to the conclusion that a properly-organised department of pedagogy, connected perhaps with a small practice school like that of Professor Rhein, in Jena, would be of great service to this College. A certain number of our Bachelors of Arts and a greater number of our graduate students engage in the profession of teaching. While in a sense it is true that a teacher is born, not made, even a born teacher may teach better for knowing something of her art theoretically, if not practically, before she begins ; and the question is not merely an educational one, it affects also the wage-earning capacity of our graduates and graduate students. There is reason to believe that the endowment of a chair of pedagogy at Bryn Mawr is not far distant, and this endowment will be welcomed with the liveliest satisfaction.

The need of a library building to contain not only the library proper but professors' rooms and seminary rooms, has proved even greater than heretofore, and the desire has been frequently expressed that the funds for such a building might be obtained and the building erected as a memorial of Dr. Rhoads. In none of the objects needed in the immediate future of the College was his interest more profound.

The special attention of the Academic Council, a body created by the Trustees in the year 1893-94 to regulate the requirements for the higher degrees of Master of Arts and Doctor of Philosophy, was given to the important subject of further defining the requirements for these degrees at Bryn Mawr College. A committee, consisting of Professors Hopkins, Warren, Keasbey, Mackenzie, and Lodge, carried on an extensive correspondence with other universities and colleges in this country and abroad, tabulated the requirements made by them, and brought in recommendations defining more exactly the general requirements announced in the program and approved by the Trustees. After careful consideration the recommendations of the committee were adopted by the Academic Council and were put into immediate operation. It was voted in the Council to require all applicants for the degree of Master of Arts or Doctor of Philosophy to file applications with a Graduate Committee consisting of the President of the College as permanent Chairman and three members of the Council, elected for the term of one, two and three years respectively, and to entrust to this committee the duty of accepting or rejecting these applications after full consultation with the heads of the departments in which the degrees were to be taken.

Two formal assemblies were held during the year ; — the Memorial meeting in honor of the late Dr. James E. Rhoads, on January 2nd, all the proceedings of which have been fully set forth elsewhere, and the annual conferring of degrees on June 6th.

A full list of the degrees conferred and of the fellowships and scholarships awarded for the year 1895–96 may be found in the appendix to this report. After the degrees had been conferred Professor Basil L. Gildersleeve, of the Johns Hopkins University, delivered an address on “The Spiritual Rights of Minute Research,” which was afterward printed in pamphlet form in order that such genial and inspiring words might reach a wider circle of our friends.

At the request of the President the Trustees voted to omit the inaugural ceremonies that usually mark the beginning of a new president’s administration. The coöperation between the first President of the College and the Dean of the Faculty had been so close during the past nine years that the closing of the former and the opening of the present administration marked a continuance rather than a change of policy.

A full list of the speakers who have addressed the College as a whole, the Graduate Club, the Philosophical Club, the Christian Union, the De Rebus Club, the Missionary Society, or the Temperance Association will be found in the Appendix to this report.

It is a matter for congratulation that in times of unprecedented financial depression, in which many great colleges and universities have remained stationary, or have lost appreciably in students, the growth of this College has shown its usual rate of increase. The numbers in our graduate school are especially to be noted because of the great number of graduate departments recently organised throughout the

country, or recently for the first time thrown open to women. A table showing the increase for the past ten years and the degrees conferred during these years will be found in the appendix to this report.

The entire number of students enrolled during the year was 283, an increase of 40 as compared with the enrollment for the preceding year. There were 49 graduate students, including fellows. The number of graduates was more than one-sixth of the whole number of students. Of the undergraduates 232 were candidates for the degree and 2 were "hearers." There were 245 students resident in the college halls, and 38 non-resident.

The two hundred and eighty-three students enrolled during the past year may be classified according to states and countries as follows:

Maine, 3 ; New Hampshire, 3 ; Massachusetts, 19 ; Rhode Island, 4 ; Connecticut, 9 ; New York, 43 ; New Jersey, 16 ; Delaware, 6 ; Pennsylvania, 98 ; Maryland, 14 ; Ohio, 4 ; Indiana, 13 ; Illinois, 5 ; Iowa, 5 ; Michigan, 1 ; Wisconsin, 2 ; Minnesota, 2 ; California, 2 ; Kentucky, 6 ; Virginia, 3 ; West Virginia, 1 ; Alabama, 1 ; North Carolina, 2 ; Georgia, 2 ; Louisiana, 1 ; District of Columbia, 3 ; Missouri, 1 ; Arizona, 1 ; Kansas, 1 ; Oregon, 1 ; Nevada, 1 ; Canada, 3 ; Nova Scotia, 1 ; Great Britain, 5 ; Japan, 1.

The distribution of students in the above table shows that Bryn Mawr is winning for herself a national reputation, and is in no sense of the word a local institution.

The distribution of the students among the several departments was as follows :

Sanskrit and Comparative Philology, 5 ; Greek, 44 ; Latin, 80 ; English, 169 ; Anglo-Saxon, 11 ; German, 51 ; Gothic and Teutonic Philology, 3 ; French, 44 ; Old French, 2 ;

Spanish, 7 ; Italian, 8 ; Semitic Languages and Biblical Literature, 9 ; History, 82 ; Political Science, 46 ; Philosophy, 51 ; Biblical Study, 39 ; Mathematics, 35 ; Physics, 17 ; Chemistry, 66 ; Biology, 52.

More has been done in the past year than in any of the years preceding toward rendering accessible to poorer students the facilities for study we possess. Miss Ethel Powers, of New York, the sister of Miss Anna Powers, a graduate of the class of 1890, who died in the beginning of the last academic year, presented to the College a scholarship of \$200, to be known as the Anna Powers Memorial Scholarship, and to be annually awarded to an undergraduate student of at least one year's standing who finds herself in need of financial aid. The Alumnæ of the College undertook to raise a fund of \$8,000, to be known as the Dr. James E. Rhoads Endowment Fund, and have thus far actually raised over \$5,000. The interest of this fund is to be applied to the aid of undergraduate students. Contributions to the amount of over \$650 were received during the year by the Committee of the Students' Loan Fund. It is a fact well known to our Secretary's office that many students are turned away from Bryn Mawr every year on account of the lack of undergraduate foundations and undergraduate scholarships, such as exist in other colleges ; and our graduate department also would be greatly strengthened by the addition of more fellowships and scholarships.

Much attention was given during the past year to the college grounds and buildings, to the perfecting of appliances for safety in case of fire, and to the elaboration of plans for the future planting and laying out of the college grounds. The east wing of Pembroke Hall was finished by September

1st. By the construction of sound-proof music rooms under this wing provision was made for the first time for the needs of students wishing to keep up their music during their college course. There was also provided on the ground floor a large sitting-room for the use of non-resident students, which has added greatly to their comfort. This wing was completed within the time specified by the contract, and was furnished by October 1st, and immediately occupied by thirty-eight students. After a year's experience the pantries and store-rooms of Pembroke Hall proved too small, and through the summer extensive alterations both in the kitchen facilities and in the heating system were carried out by the architects.

By the building of Pembroke Hall the College crossed the boundary line separating the large college from the distinctively small one, and during the year the practical administration of the president's office was successfully adjusted to these changed conditions. The ordinary repairing and carpentering had so increased that it no longer seemed an economical plan to give out the work to contractors. A head carpenter was engaged, and the carpenter's shop moved from the basement of Taylor Hall to the disused laundry over the central boiler house, which was altered and equipped with carpenter's tools and supplies of all kinds, and throughout the year all the college work was done on the premises at a cost much less than the previous cost of such work.

In like manner it was found that the time had come to engage a thoroughly competent engineer, able himself to carry out changes in the heating system, make repairs, and keep the various boilers in good condition. The necessity of this step was shown by the thoroughly unsatisfactory state of the

central Harrison boilers, which had suffered much at the hands of unskilled firemen, and on which \$500 had to be spent before the opening of the academic year. It was a significant fact that two engineers, anxious for the post, refused it after examining the boilers. By unremitting attention throughout the year the whole heating system was carefully repaired ; an excellent engineer, with a staff of three day and two night firemen, was put in charge, and an engineer's shop stocked with all necessary implements fitted up in the boiler house. Good results were immediately obtained ; Dalton Hall, for example, which had never been even moderately well heated, was thoroughly comfortable throughout the unusually severe winter of last year, and the dynamo of the physical department was for the first time properly managed ; and in many other ways a marked difference showed itself.

In the academic buildings various pieces of work, such as the fitting up of special rooms for the use of different departments, and more especially the proper fitting up of the physical laboratories in Dalton Hall, had been postponed from year to year until they could be postponed no longer ; and the renewal of much of the apparatus that had been in use for the past ten years had become a matter of necessity. Had not the College been fortunate in securing gifts to meet these exceptional expenditures, the requisite work could not have been done without seriously crippling our academic departments. Some of the more important alterations and additions made are here briefly enumerated. In Taylor Hall the large lecture-room over the inner library was entirely shelved in order to provide for the overflow of books from the general library. In the library itself three new cases were added, and several other important alterations effected in the historical

and political seminary. One side of the room was shelved, the tables were so altered that the room now accommodates the very large number of students belonging to the historical department, the walls were painted, and a gift from a friend of the College enabled us to cover the walls and the four sides of the two square pillars that divide the room with engravings and photographs of men and women famous in European and American history. All the floors in Taylor Hall and all the staircases were re-stained and re-oiled, and the exterior of the hall was entirely renovated, the masonry being pointed, and all the outside wood-work painted. In Dalton Hall the Rowland Grating room on the fourth floor was for the first time fitted up for the use of professors and graduate students in the department of physics. The tables in the large chemical laboratory were fitted with locked cases for apparatus; these cases, which had at first been dispensed with for reasons of economy, having proved absolutely necessary if an account was to be kept of the breakages of the students. A workshop for the making of physical apparatus was fitted up in the basement of Dalton Hall; the physical laboratories were provided with tables for advanced work and with the necessary shelving; and an expert physical instrument maker has been employed ten hours daily throughout the year in making pieces of apparatus for use in instruction in physics and in physiology. In Merion Hall the entire system of plumbing was renewed. In the Gymnasium extensive additions and alterations were necessitated by the construction of the swimming-tank. A drying room for bathing suits and fourteen new dressing-rooms were provided in the basement. An additional coil for heating purposes was placed in the neighborhood of the pool, and under the direction of the professor of physics an electrical connection was made between the



boiler-house and the swimming-tank, in order that the temperature might be moderated at pleasure. The steam-main carrying heat to the gymnasium from the boiler-house, which proved to be completely eaten away, was replaced by a new two-inch wrought-iron pipe carefully boxed. Over one thousand dollars was expended in putting the boiler-house in complete repair.

Our means of protection from fire were especially considered, and a gift of \$1,448.87 was obtained in order to make extensive improvements and modifications in the existing system. At the beginning of the year, the pump in the boiler-house having proved to be in need of very serious and extensive repairs, it was replaced by a Worthington Underwriters' 500-gallon fire pump,  $14 \times 7\frac{1}{4} \times 12$ , intended not only to serve the purpose of the former pump in supplying the college halls with water, but also to afford protection in case of fire. The introduction of this pump necessitated an enlargement of the pipes leading from the pump to the cistern, and an eight-inch wrought-iron suction-pipe was put in. Since the new swimming-tank under the gymnasium holds 66,500 gallons of water, it seemed best to connect this reserve supply of water with the fire-pump; a six-inch suction-pipe was accordingly put in, tapping the water in the tank a few inches from the bottom. The work was one of some difficulty, because the pipe had to be laid at a considerable depth, and in digging a great deal of rock was encountered. A large number of covered buckets to contain both water and sand were placed in the various college buildings, and the supply of Miller fire extinguishers was largely increased. Ladders and a jumping-net were purchased. The linen hose belonging to the College being carefully tested and found not to hold water, four hundred feet of new  $2\frac{1}{2}$ -inch rubber-lined hose of

the best quality were purchased; and this necessitated the purchase of a hose-cart of the most approved model, capable of carrying eight hundred feet of hose. The couplings, both on the fire-plugs and on the hose, being found old-fashioned and unsatisfactory, all the fire-plugs and every hundred feet of hose were fitted with Jones's couplings.

Since, during the academic year, only the night watchman, the night firemen, and the farmer, and during the summer only the night watchman and the farmer could by the existing arrangements be immediately summoned, it was thought best to connect a steam fire-whistle with the direct main high-pressure steam-line in the central boiler-house, so that it might be possible to summon at once the men employed by the College who live in the village and all other available assistance. The whistle now in use can be distinguished without difficulty five miles and more from the College. At the request of the President fire brigades of the students were organised in each of the halls of residence, and a high state of efficiency was maintained, largely through the efforts of our English students, who have been captains of such brigades in the English colleges of Girton and Newnham. During the year three slight fires were put out by these brigades. In the year 1893-94, a complete system of electric fire alarms, not mentioned in the president's report for that year, had been placed in all the halls of residence. These alarms can be rung both from the outside of the hall and from different points within the hall, and the gongs are sufficiently loud, it is believed, to arouse every student. On account of this improved fire service it has been found possible to reduce the rate of the insurance policies on college buildings falling due within the year from seventy-five to seventy per cent. •

In the careful provisions against fire thus made in connec-

tion with the boiler-house, the one thing not foreseen had been that the source of protection itself should burn. On the 26th of July, between 1 and 2 a.m., it was discovered that the boiler-house was in flames, the fire having in all probability started in the carpenter's shop in the second story of the building. All efforts were directed to saving the surrounding buildings ; in the boiler-house itself the flames had gained too much headway to be checked, and the boilers themselves and the fire pump on which the entire water supply depended were in the centre of the fire. As the night was absolutely still, even the nearest buildings were uninjured. It was, of course, necessary that the boiler-house should be immediately rebuilt, and in the absence of the Chairman of the Committee on Buildings and Grounds and of the President of the College, Henry Tatnall gave the matter his close personal attention. In order to avoid a recurrence of a similar catastrophe, the shops were entirely done away with, and the boiler-house was rebuilt with iron roofing and entirely fire-proof. Very little damage had been done to the boilers and pumps ; they were repaired under the direction of the college engineer, who was able to make many improvements in the plant. There was no insurance on the building, or on the shops or boilers. Until the close of the past fiscal year the amount charged to the Fire Loss Account was \$1,396.50: it is probable that at least \$2,000 must be added to this account.

It should be noted that our water supply in case of a serious fire is inadequate. The capacity of the tanks in the various halls and academic buildings, connected, except in the case of the tank in Taylor Hall, with the fire hose on the floors of the several buildings, but available for the interior of those buildings only, is as follows :—Taylor 2,700 gallons, Dalton 6,165 gallons, Radnor 3,375 gallons, Denbigh 2,250

gallons, Pembroke East 10,125 gallons, Pembroke West 10,125 gallons. Apart from these tanks we have at our command only the underground cistern to the north-east of Merion Hall, containing when it happens to be full, 77,280 gallons, the swimming tank with a capacity of 66,500 gallons, and the tank in the boiler-house containing 2,229 gallons. To secure temporary protection from fire, while the boiler house was rebuilding, a connection was at once made between the main of the Bryn Mawr Water Company on Merion Avenue and the nearest section of the college fire-line. By reason of this connection we can hereafter count on the supply of the Bryn Mawr Water Company when our own reserve is exhausted, but the pressure is insufficient to throw the water thus obtained above the second story of our buildings.

The swimming-tank which has proved so important a part of our water supply was one of the chief pleasures of the year. Constructed during the summer of 1894 from gifts contributed by the students, alumnae and friends of the College, it was open to the students daily on week days from 7 a.m. to 10 p.m., the water being at its full depth for the first four days of the week, during which time the pool was used by swimmers only, and lowered on Fridays and Saturdays to the depth of four and a half feet for the benefit of those who had not yet learned to swim.

The success of the swimming tank stimulated anew the students' interest in the creation of an athletic ground. It was found that the conformation of the land in the hollow below the professors' houses on College Hill would permit us to construct there, at moderate expense, a large level field enclosed by a raised bicycle track fifteen feet in width and four laps

to the mile ; and that this field, which, during the spring and autumn could be used for basket ball, tennis, and other games, could in the winter be converted into a large skating pond. According to the estimates the sum of \$4,164 would enable us to complete the work. The need is a very real one, as at present the students have no place large enough for their games, no private place where they may learn to ride the bicycle, and no suitable place for skating. The Dove Mills Pond, which is now used, is a cause of considerable anxiety, since a very rapid stream flows through it, the ice is often very thin, and the depth is in many parts very great.

Until the present year the College has never owned a map indicating the location of the different water supply pipes, fire mains, gas pipes, and drainage system, our knowledge of the location of all these different systems depending on the memory of an employee who had been for the past nine years in charge of all such work. In view of the difficulties likely to arise from this state of things, Mr. Samuel M. Garrigues, a civil engineer who had been consulted about much of the work in past years, was employed to make a detailed map, wherever necessary digging up the ground in order to locate as exactly as possible the different pipes. He was also asked to include in this map the new property purchased from the Kennedy estate and College Hill, marking on it all the principal shrubs and trees, taking the levels every two feet on the College grounds proper, and every five feet on the newly acquired property and on College Hill. This map has proved of the greatest service during the past year.

By a vote of the Trustees the well-known landscape gardener, Mr. Frederick Law Olmsted, who stands at the head of his profession, both in America and abroad, was

last June consulted in regard to the future laying out of the grounds. He and his son, Mr. John C. Olmsted, spent a day at the College in examination of the grounds and in consultation with Justus C. Strawbridge, the only member of the Committee on Buildings and Grounds able to be present, and with the President of the College. Since that time his son has twice visited the College, and will soon be able to present preliminary suggestions.

An important and much needed improvement very closely affecting the material interests of the College was continued and will in the coming year be completed by the Township.

Before 1896 all the roads inclosing the college property will have been macadamised. Toward the macadamising of the road that passes in front of Pembroke Hall the College contributed \$220 obtained through the generosity of a friend. A gift from the same friend enabled us to complete a new system of boardwalks, for the most part four feet in width, connecting all the buildings on the college grounds, and the professors' houses on College Hill.

A fifth professor's house was added during the year. Plans and specifications were prepared by Cope and Stewardson, and the house was entirely completed by August 31st, at a total cost of \$6384.28, including the expense of a macadamised road and a good deal of rather troublesome and expensive grading. This cottage, which is occupied by Dr. Charles M. Andrews, seems to have impressed everyone as the most satisfactory in its external and interior arrangements of the professors' houses.

The attention of the Trustees is especially called to the full information in regard to the working of the College during the past year given in the appendix to this report. The

appendix contains the list of re-appointments and changes in the instructors and officers for the year 1895-1896; a brief statement of the scholastic work of the past academic year, compiled from the reports prepared by the professors and instructors in the various departments; a tabular statement of the courses of instruction ; the report of the librarian ; a list of the fellowships and scholarships awarded for the year 1895-96; the names of candidates receiving degrees during the year; a tabular statement of the increase in the number of students and the degrees conferred during the ten years from 1885 to 1895; a tabular statement of the distribution of students in the various departments of study during the same ten years; the gifts made to the College during the year; a list of the speakers who have addressed the College; the titles of the scientific publications of the faculty that have appeared in the past year; and the memorial resolutions in honor of Dr. James E. Rhoads, adopted by the Trustees, the Faculty and the Alumnæ of Bryn Mawr College.

*October 11th, 1895.*

M. CAREY THOMAS,  
*President.*

## APPENDICES.

---

### *Re-appointments and Changes in the Academic Staff and in the Officers of Administration for the Year 1895-96.*

EDWARD WASHBURN HOPKINS, PH.D., resigned to accept a Professorship of Sanskrit in Yale University.

HERMANN COLLITZ, PH.D., re-appointed Associate Professor of Comparative Philology and German.

CHARLES MCLEAN ANDREWS, PH.D., promoted to be Associate Professor of History.

GONZALEZ LODGE, PH.D., promoted to be Professor of Latin.

ARTHUR STANLEY MACKENZIE, PH.D., re-appointed Associate Professor of Physics.

JAMES DOUGLAS BRUCE, PH.D., re-appointed Associate in English Philology.

THOMAS HUNT MORGAN, PH.D., promoted to be Professor of Biology.

JOSEPH W. WARREN, M.D., re-appointed Associate Professor of Physiology.

DICKINSON SERGEANT MILLER, PH.D., re-appointed Associate in Philosophy.

ELMER P. KOHLER, PH.D., re-appointed Associate in Chemistry.

ROBERT GREGG BURY, A.M., resigned Lectureship in Greek and Latin Literature.

MORTIMER LAMSON EARLE, PH.D., appointed Associate Professor of Greek and Latin.

PAUL ELMER MORE, A.M., appointed Associate in Sanskrit and Classical Literature.

ALFRED HODDER, appointed Lecturer in English.

RICHARD NORTON, A.B., appointed Lecturer in the History of Art.

ROSE CHAMBERLIN, re-appointed Reader in German.

FREDERIC M. PAGE, resigned Readership in Romance Languages.

ABBY KIRK, A.B., re-appointed Reader in English.

HARRIET RANDOLPH, PH.D., re-appointed Demonstrator in Biology and Reader in Botany.

FLORENCE V. KEYS, A.B., re-appointed Reader in English.

THÉRÈSE F. COLIN, A.M., re-appointed Reader in Romance Languages.



PHŒBE A. B. SHEAVYN, resigned the Readership in English and was elected Fellow in English.

FLORENCE BASCOM, PH.D., appointed Reader in Geology.

ALICE BERTHA FOSTER, M.D., re-appointed Director of the Gymnasium.

ELIZABETH BATES, re-appointed Assistant in the Gymnasium.

MARY SHERWOOD, M.D., re-appointed Lecturer on Hygiene and Physician of the College.

HENRIETTA R. PALMER, A.B., promoted to be Librarian.

JANE BOWNE HAINES, appointed Associate Librarian.

ISABEL MADDISON, B.Sc., appointed Assistant Secretary to the President.

MARY HARRIS, A.B., appointed Recording Secretary.

MRS. REGINALD CHASE, MRS. DERKHEIM-IRWIN, and MISS SOPHIA KIRK were re-appointed to the charge of Radnor Hall, Denbigh Hall and Merion Hall respectively.

MISS ALICE RAWLE NEWBOLD resigned the charge of Pembroke West, and MISS IDA GARBER was appointed in her stead, having resigned the charge of Pembroke East. MISS LAURETTE EUSTIS POTTS was appointed to the charge of Pembroke East.

*Report for the academic year ending June 6th, 1895, compiled from the statements submitted to the President of the College by the instructors in the various departments.*

*Sanskrit and Comparative Philology.*

Dr. Edward W. Hopkins conducted a graduate class in Beginners' Sanskrit, one hour weekly throughout the year. Selections from Lanman's Reader, part of the Nala, and a few Vedic Hymns were read by the class. Dr. Hopkins also delivered a graduate course of lectures on Comparative Philology (forms and syntax), one hour weekly throughout the year.

*Greek.*

Dr. Herbert Weir Smyth conducted the graduate work in Greek. The instruction centered upon Thucydides, whose entire history was read by the members of the class. In the department of graduate Greek, emphasis is laid upon the necessity of reading large masses, if not the entire work, of the author chosen for the year, in the belief that sympathetic appreciation of the genius of an ancient classic and sound philological study of his text can be obtained only in this way. In addition to reading the text of the historian, the class interpreted narrative portions of the second book and the Funeral Oration of Pericles (once weekly), wrote exercises modelled on the style of Thucydides (during the first semester), and translated the inscriptions in Hicks' Greek Historical Inscriptions to the end of the Peloponnesian War (pp. 1-115). Lectures were given by the instructor on the following subjects: Ullrich's theory of the composition of Thucydides' History ; the dialect, syntax, and style of Thucydides ; the development of prose style from Herodotus to the end of the fifth century, B.C. ; the treaties in Thucydides ; and the form and contents of Greek historical inscriptions. The members of the class submitted, at the end of the year, papers on the following subjects: abstracts and criticisms of the following treatises of Dionysius of Halicarnassus : *De Thucydide judicium*, *Epistola ad Cn. Pompejum*, *De iis quae Thucydidi propria sunt* ;

other ancient criticisms of Thucydides ; ancient imitators of Thucydides ; the historical present in the first three books of Thucydides.

The undergraduate courses in the minor, major and post-major were given by Dr. E. W. Hopkins, Dr. H. W. Smyth and Mr. R. G. Bury, as laid down in the program without change. The Lecturer on Classical Literature reports that the work done by students in the department under his charge has been on the whole of a decidedly satisfactory character. In the first semester two hours a week were devoted to lectures on the history of the Greek epic and lyric poetry. In the second semester an equal time was spent in lectures on the Greek drama and dramatic poets, accompanied by a less exhaustive survey of Greek prose and poetry down to the Alexandrine period. An attempt was made throughout to combine accuracy of detail with a clear view of the general lines of literary development ; and the students were required to supplement the knowledge supplied in the lectures by reading, either at first hand or in English translation, selected portions of the more important authors dealt with.

The class in elementary Greek, conducted by Dr. Smyth, studied the greater part of White's *Beginners' Greek Book*, two books of the *Anabasis*, and two and a half books of the *Iliad*. The fact that a larger number of students elected it than ever before proves that the interest in this course is not flagging.

#### *Latin.*

Dr. Gonzalez Lodge conducted the graduate work in Latin. The courses comprised four hours weekly during the year, and were divided as follows, the main subject of study being the development of historiography among the Romans.

One hour weekly was devoted to seminary interpretation by the students themselves, and the subject treated was the opening chapters of the twenty-first book of Livy.

In connection with this Dr. Lodge gave a course of lectures, one hour weekly, on Livy and Tacitus, treating historically, and from the point of view of the sources, their lives and works, and the history and condition of the text.

He also lectured for one hour weekly on the fragments of the Roman historians from the earliest times down to Livy. This took

up the whole of the first semester. In the second semester Dr. Lodge interpreted, during this hour, the opening chapters of the *Annals* of Tacitus.

A fourth hour was devoted to the reading of Rushforth's collection of "Latin Historical Inscriptions" until Christmas, after which time there were lectures on the moods and tenses of the Latin verb until the end of the year.

In the undergraduate department the work was approximately the same as in previous years. In the Minor Course Dr. Lodge read Livy, Books XXI. and XXII., two hours weekly until Easter, after which he took up Cicero *de Senectute*; in connection with the latter the class read *de Amicitia* at sight. Weekly exercises in Latin composition were conducted as in previous years, and the private reading was likewise the same, viz., Vergil, *Æneid*, VII.-X.

With the major class Dr. Lodge read Tacitus, *Annals*, I.-VI., so far as the Life of Tiberius was set forth therein, three hours weekly during the first semester, and selected satires of Horace and Juvenal and selected elegies of Tibullus and Propertius during the second semester. The private reading was the same as in previous years, viz., selected letters of Pliny and Cicero.

In the minor course Horace was read by Mr. R. G. Bury, two hours weekly as announced in the program. In the major course, in the first semester, two hours a week were devoted to lectures on the earlier Latin poetry and prose.

In the second semester an equal time was spent in lectures on the Roman prose and poetry of the Ciceronian and Augustan periods, followed by a sketch of the early literature of the empire.

With the post-major class Dr. Lodge read Terence two hours weekly during the first semester, and Plautus during the second. In the first semester the class read critically the *Heauton Timorumenos*, and rapidly the *Andria*, *Phormio*, and *Adelphi*. In the second semester Plautus's *Captivi* was selected for critical study and the *Menaechmi*, *Trinummus* and *Rudens* for rapid reading. Mr. Bury read with the same class selections from Lucretius twice weekly during the first semester, and selections from Catullus twice weekly during the second semester; and lectured on Latin Prose Composition once weekly throughout the year.

*English.*

The graduate work in English was conducted by President M. Carey Thomas, Dr. Mary Gwinn, Dr. James Douglas Bruce and Miss Phœbe Sheavyn, as laid down in the program.

A graduate class in the Early English Drama met twice weekly throughout the year. President Thomas opened the course, and lectured for the first six weeks ; the remaining lectures being given by Miss Sheavyn.

Dr. Gwinn met a class composed of graduate and undergraduate students in Critics of the Nineteenth Century, twice weekly throughout the year.

Dr. Bruce lectured to graduate students twice weekly throughout the year on the Old English system of sounds and its relation to the systems of the cognate Teutonic languages, discussing briefly toward the close of the course the Middle English vowel system. At the end of each semester a few meetings were devoted to practical exercises in the application of the principles expounded in the lectures.

Dr. Bruce also conducted a graduate course on the poems of the Exeter Book, twice weekly throughout the year. The minor epic and elegiac poems were studied with especial reference to the history of the construction and interpretation of the text, and a full commentary on the relation of the epic pieces to the chief Germanic saga-cycles was given. A course of lectures on the main features of the Old English syntax with reference to their development in Middle and Modern English accompanied the translation of *Guthlac* and *Crist*. Reports on important articles relating to the subject of the lectures were from time to time required of the students. A few dialectic texts from Sweet's *Second Anglo-Saxon Reader* were read at the conclusion of the course.

Dr. Bruce met a class of graduate students twice weekly throughout the year for practice in translation especially. The *Elene*, more than half of the *Genesis*, and two books of the Anglo-Saxon version of Bede were read in this way. Reports were made by the students on the more important articles and dissertations that relate to these texts.

The undergraduate courses were conducted as usual. A class of one hundred and seventy students attended, three hours weekly

throughout the year, President Thomas' lectures on English literature, covering the period from the time of Shakespeare to the present time.

The essay work of the first and second year, in connection with the lectures on English literature, equivalent to two hours weekly, was conducted as usual by Dr. Gwinn, assisted by Miss Abby Kirk in the first year, and by Miss Keys in the second year. In the first semester of the first year's work fifty-nine students were registered, fifty-four of whom did full work. Two rhetoric papers (abstracts of Wendell's *English Composition* and Genung's *Practical Rhetoric*) were written, and one essay. In the second semester fifty students were registered, forty-four of whom completed the course. During the first eight weeks a study was made of the construction of the essay, *Essays in Criticism* being used as the basis of the work. Four papers were written and weekly meetings of the class were held. The last half of the semester a second essay was written. Miss Kirk met each member of the class twice during the year for private work, besides being "at home" to the class for general consultation, three hours of each week.

The second year's work was similarly conducted, Miss Keys meeting the members of the class, both individually and together, for conference and advice. Each student in the course wrote four carefully prepared essays.

The George W. Childs essay prize for the year was awarded by the English Department to Miss Edith Pettit, of Philadelphia.

A minor class in Anglo-Saxon met Dr. Bruce three hours weekly throughout the year for the first year of the major course in English. The *Outlines of Anglo-Saxon Grammar* and a majority of the prose selections in Bright's *Reader* were studied in the first semester. During the second semester, in addition to the specimens of Anglo-Saxon poetry included in Bright's *Reader* about one-half of *Beowulf* was read with the class. In the earlier part of the semester the class was practiced in the scansion of the alliterative verse according to Sievers's system as expounded in lectures accompanying the reading. Lectures were also given in the elements of myth, saga and history contained in *Beowulf*, on the chief theories that have been proposed regarding its composition, and on questions of Teutonic antiquities in general

suggested by the text. The same class also met Dr. Bruce twice weekly throughout the year in Middle English. The grammatical introduction to Sweet's *First Middle English Primer*, with his selections from the *Ancren Riwle*, were first studied. The rest of the first semester was devoted to the reading of about one-half of *Piers Plowman* and the whole of the *Pearl*. During the second semester about two-thirds of *Sir Gawayne and the Green Knight*, a portion of *Guy of Warwick*, and the pieces in Morris and Skeat's *Specimens of Early English*, Part I., were read with the class. Lectures on the documents from which the *Specimens* are drawn were given by the instructor. As parallel reading to *Piers Plowman*, Jusserand's work on Langland, and his *Wayfaring Life in the Middle Ages*, were read by the class.

#### *Teutonic Philology.*

Dr. Hermann Collitz conducted graduate courses in Teutonic Philology. Owing to the fact that instruction had to be given to graduates who were pursuing advanced courses in Germanic in their first, second, and third years of study, the number of graduate courses has been larger than usual, six different courses having been given in the first semester, and seven courses in the second semester. The time allotted to each course was restricted to one hour weekly, except that in the first semester two hours weekly were given to the course in Old Norse. The following courses were given :

*Gothic.* This course was intended for beginners in Gothic, and was conducted in the same way as in previous years, in that the study of Gothic grammar was combined with that of the elements of comparative Aryan grammar. For a more detailed account see the president's report for 1893-94.

*Old Norse.* The elements of Old Icelandic phonetics and inflection were studied in Sweet's Icelandic Primer. Although a first course in Norse, it was conducted as much as possible on historical and comparative principles, a constant comparison being made of the Old Norse sounds and forms with those of the early Teutonic languages. The grammatical part of the course was followed by the reading of selections from the younger *Edda* and of the *Thrymskvitha* from the elder *Edda*.

*Old Saxon.* In the spring of 1894 Professor Zangemeister, of Heidelberg, found in Rome, in a Latin MS. of the Vatican library, an additional fragment of the Old Saxon *Heliand* and several fragments of a hitherto unknown Old Saxon poem in alliterative verse, whose subjects are taken from the Old Testament, or more especially from the Genesis. The new light thrown by this discovery on Old Saxon literature, the origin of the *Heliand*, and the relation of the Anglo-Saxon *Genesis* to Old Saxon poetry, suggested the idea of a course in Old Saxon, in order to acquaint the students with the results of Zangemeister's find. The course consisted chiefly of lectures, reviewing the sources of our knowledge of Old Saxon, and discussing the literary and philological problems connected with the *Heliand* and the newly-found fragments of the *Genesis*. Owing to the pressure of time the grammar had to be treated rather rapidly, so that it was only possible to point out to the students the chief characteristics of Old Saxon in distinction from Old High German and from Anglo-Saxon. Finally a few specimens of Old Saxon texts were carefully read and analysed with regard to variations in the dialect and differences between the various manuscripts.

*Old High German.* In continuation of the course in Old High German given in the previous year, several difficult texts from Braune's Old High German Reader (among others selections from the Old High German translation of Isidor's treatise, *Contra Judaeos*, and from Otfried's *Harmony of the Gospels*) were critically read and analysed.

*Introduction to the Study of Teutonic Philology.* These lectures included an outline of general phonetics (with special reference to Prof. Bell's system), a survey of the Aryan languages, a sketch of the various branches of the Teutonic group, and a brief history of Teutonic philology.

*Comparative Teutonic Grammar.* (Continued from last year.) This course of lectures was given to students that had previously studied Greek and Latin, as well as Gothic, Old Norse, Anglo-Saxon, Old Saxon, and Old High German. Teutonic declension having been discussed in the previous year, it seemed advisable to spend the current year in a detailed study of Teutonic conjugation. The system of the Teutonic verb and the relation of the different



Teutonic classes to the Sanskrit, Greek and Latin conjugations were explained, and the inflectional endings compared with those of the cognate languages. The course was conducted, as in former years, with a view to encouraging original work on the part of the students.

*Teutonic Seminary.* A weekly hour was set aside for the seminary in the second semester, in order to discuss some special subjects in historical Teutonic phonetics. Part of the material for the discussion was furnished by investigations begun by two of the graduate students, both of whom expect to carry on their work and later to publish their results.

#### *German.*

Graduate students in German followed the courses offered by Dr. Collitz in Teutonic languages. Miss Chamberlin also conducted a course in Fritz Reuter's "*Ut mine Stromtid.*"

The minor and major courses, of five hours weekly each, were arranged as in previous years, two hours weekly in each course being given to lectures on German literature (delivered in German), and three hours weekly to critical reading, prose composition and practice in conversation.

In the minor class, the lectures given by Dr. Collitz covered the classical period of Modern German literature from the middle of the last century to Goethe's death. Two hours weekly of critical reading were spent, under Miss Chamberlin, in reading Schiller's *Wallenstein* in the first semester, and the first part of Goethe's *Faust* in the second semester. Once weekly the class met Miss Chamberlin, for practice in German prose composition and German conversation.

The private reading, on which examinations were held during the year, was, in the first semester, Lessing's *Emilia Galotti* and Goethe's *Iphigenie* and *Egmont*, and in the second semester, selections from various *Volksbücher* and Schiller's *Don Carlos* and *Braut von Messina*.

In the major class Dr. Collitz lectured on the history of German literature from the earliest times to the beginning of the sixteenth century. The last weeks of the second semester, however, were

given to a brief sketch of Modern German literature, from the beginning of this century to the present time. Once weekly, in connection with these lectures, the class read with Dr. Collitz selections from Old and Middle High German works in Modern German translations. With Miss Chamberlin the major students read for one hour weekly, in the first semester, the second part of Goethe's *Faust*, and in the second semester the Goethe-Schiller *Correspondence*. Selected letters were carefully studied, especially those of a critical character, and the works criticised were read privately. The class met once weekly throughout both semesters for prose composition. Three members of the class made marked progress, one writing an exceptionally good short essay in German.

The private reading in the major class included in the first semester Lessing's *Nathan der Weise*, selections from Lessing's *Laoköon*, and Freytag's *Rittmeister von Alt-Rosen*, and in the second semester Goethe's *Tasso*, Scheffel's *Ekkehard*, Keller's *Dietegen*, and selections from various commentators.

Post-major courses in Gothic, once weekly by Dr. Collitz, and in Old High German, once weekly by Miss Chamberlin, were given. This is the first time that undergraduate courses have been offered in the old Teutonic languages. Miss Chamberlin also conducted a post-major class, once weekly, in German dialects, and a class, once weekly, in modern German reading.

The elementary class met Miss Chamberlin five hours weekly during both semesters. The usual work was done in grammar and simple reading. Schiller's *Wilhelm Tell*, Goethe's *Hermann und Dorothea* and *Iphigenie*, Freytag's *Journalisten* and portions of *Soll und Haben*, and Marlitt's *Goldelse*, were read; also numerous selections from prose and poetry were read at sight.

### *French.*

The graduate work in French was conducted by Dr. Fontaine. Two hours a week throughout the year were devoted to the study and reading of French epic poetry. *Huon de Bordeaux*, *Doon de Maience*, *Aliscans*, *le Couronnement de Louis*, were read in the class and discussed. Works of reference on the origin and development of French epic poetry were also consulted and reported upon. One

hour a week was taken up by the study of Old French syntax, the texts used being *Aucassin et Nicolette* and *Extraits des Chroniqueurs Français*. The graduate students have also carried on special investigations in French versification and the dramatic unities.

During the first semester and about one-half of the second the students of the minor class heard lectures by Dr. Fontaine on nineteenth century literature. The prose works of Madame de Stael and Chateaubriand were first studied, and their influence discussed. The most important poems of Lamartine, Musset, de Vigny, Victor Hugo, Théophile Gautier, and Sainte-Beuve were subjected to a thorough analysis, and abundant reading of literary criticism bearing on these poets was assigned to the class. A special study was made of Hugo's *Contemplations*, *Châtiments*, and *Légende des Siècles*.

The eighteenth century literature was studied in the prose works of Montesquieu, Rousseau, and Diderot. One tragedy of Voltaire and one comedy of Marivaux and Beaumarchais were assigned for special work.

The development of French fiction was made the subject of six lectures, and the course closed with the study of French poetry in the eighteenth century, especially that of André Chénier.

An evening hour was selected by Dr. Fontaine for practice in French sounds and conversation. The class was conducted so as to meet the needs of the students of the major course, but no student was refused admission to the class.

The students in the minor course met Madame Colin three times weekly throughout the year for critical readings in French prose and poetry, practical exercises in French syntax and prose composition, sight reading, dictation, and oral practice in French. Balzac's *Eugénie Grandet*, Victor Hugo's *Notre Dame de Paris*, parts of Gautier's *Voyage en Espagne*, and Mérimée's *Colomba* were read and critically studied for the wealth of expression found in those authors. The students were called upon to explain difficult passages, to summarise in French certain parts and to sketch orally leading characters. G. Eugène Fasnacht's French Composition, first year, served as a basis for written exercises. Parallel passages from French and English authors, and finally difficult extracts from representative English authors, such as Macaulay, Green, Froude, and McCarthy, were translated. The students gave proof of close

application, both in preparing and correcting this work in class. For sight reading a number of French plays were chosen,—*Bataille de Dames*, *Le Monde où l'on s'ennuie*, *Le voyage de Monsieur Perrichon*, *La Poudre aux yeux*, etc. These served as excellent models and subjects for conversation and narration. To these were added Daudet's short stories, which furnished very satisfactory results, as shown in frequent oral and written practice.

The major or second year's class met Dr. Fontaine four hours weekly, beside the evening hour selected for French conversation. Two hours were given to lectures on seventeenth century French literature; Racine's tragedies and Molière's comedies forming the centre of these lectures during the first semester. Much time was devoted to the discussion of literary criticism bearing on the nature and scope, excellencies and defects of French classical drama. The moralists of the seventeenth century furnished most of the critical reading done during the two semesters. Some sixty letters of Madame de Sévigné and Boileau's *Lutrin* and *Art poétique* were also read in the class. Fifteen lectures devoted to modern French criticism and the Parnassian school concluded the course in major French literature. Exercises in French composition have occupied an hour each week.

A post-major course has been offered this year by Dr. Fontaine to students desirous of acquiring a reading knowledge of old French texts and some familiarity with the indispensable elements of French phonetics, morphology and derivation. This class has met once a week and read *La Chanson de Roland* (first part) and *Aucassin et Nicolette*.

The students in the elementary course met Madame Colin five hours weekly throughout the year for an introduction to the study of French as required for the matriculation examination, including pronunciation and grammatical forms, reading and translation of ordinary French prose and verse. The study of grammar covered a systematic drill in verbs, regular and irregular, tense, derivation, the writing of exercises to illustrate inflexions, and the principal rules of syntax, with oral translation from French into English and English into French, on the basis of G. Eugène Fasnacht's French Grammar (second year). The work in translation was rendered both literally and idiomatically, special stress being laid upon the pecu-

liarities of French syntax, figurative language and wide vocabulary. Dictation and frequent reading to the students was resorted to in order to make them familiar with the sounds both of the individual word and the complex sentence. Whitney's Reader, extracts from Daudet and Bourget, About's *La Mère de la Marquise*, and difficult passages from recent and contemporaneous authors were made use of to that end. Both students and hearers gave evidence of genuine interest in the language.

#### *Italian and Spanish.*

Dr. Frederick M. Page conducted a graduate class in Spanish literature, twice weekly throughout the year.

The minor and major courses in Italian and Spanish were given by Dr. Page, as announced in the program, without change.

#### *Semitic Languages and Biblical Literature.*

Dr. George A. Barton gave the following graduate courses:

*Hebrew*, twice weekly throughout the year. The object of this course was to enable students specialising in New Testament Greek to acquire familiarity with Hebrew as an auxiliary to their New Testament work. The elements of the language were studied and portions of Genesis, Deuteronomy and Judges were read and critically interpreted. The class made good progress, and acquired considerable facility in reading ordinary prose at sight.

*History of Israel from the Judges to the fall of Jerusalem in A.D. 70*, twice weekly throughout the year. The instruction was given by lectures, in connection with which a careful study of all the Biblical material bearing on the subject was made. Reference was made throughout the course to the works of modern writers, and the members of the class wrote a series of papers, the preparation of which involved an independent study of the turning points of the history and a familiarity with the literature of the subject.

*Patristics*, two hours weekly till Thanksgiving, and one hour weekly during the remainder of the year. The attention of the class was confined to the sub-Apostolic literature. A general view of the

literature and its critical problems was first given by lectures, then the Epistle of Clement of Rome to the Corinthians, the Ignatian Epistles, the Epistle of Polycarp to the Philippians, the Letter of the Smyrnæans on the martyrdom of Polycarp, and the *Διδαχὴ* were read and critically interpreted. Much seminary work was done by the class in comparing this literature with the New Testament writings.

*Old Testament Seminary*, once weekly throughout the year. The work of this course was devoted during the first semester to the Psalter. Its structure and growth were studied and a critical examination of several groups of Exilian and post-Exilian Psalms was made. During the second semester the early part of the Book of Exodus was studied, with reference to its linguistic, literary, and historical features. All the work of the class was done by the seminary method and a careful study was made of the abundant literature which has grown up about these subjects.

*New Testament Seminary*, once weekly throughout the year. The New Testament Apocalypse was studied on the seminary plan textually, hermeneutically and critically. The abundant and discordant literature to which the study of this book has within the last thirteen years given rise was carefully read by the class and an independent examination of the book itself was made in the hope that the work of the class might throw some light on this perplexing problem.

Dr. Barton also conducted the following undergraduate courses:

*Biblical Literature*, given as a part of general philosophy, two hours weekly in the second semester. The work was done, as in previous years, mostly by lectures. Readings were assigned in various works on the subject; the works most constantly used were Driver's *Introduction to the Literature of the Old Testament* and Toy's *History of the Religion of Israel*. More attention than in former years was given to the Biblical text, and the class gained a fair degree of familiarity with the most important parts of the Bible. Constant comparisons were made of the different books and parts of books, and attention was directed to the organic unfolding of the literature and of religious ideas.

*Semitic Languages*, major course, four hours weekly. One hour each week of the course throughout the year was devoted to

an historical study of the cuneiform literature and a comparison of it with the literature of the Hebrews, preserved for us in the Old Testament. The discovery and decipherment of the Assyrian inscriptions, the historical development of the Babylonian-Assyrian literature and art, and the place of these peoples in the civilisation of western Asia were studied, and the class became familiar with the numerous points of helpful contact between this literature and the Old Testament.

During the first semester three hours weekly were given to the study of Hebrew. Readings were selected from the Books of Judges and Isaiah ; the portions selected were critically read and interpreted, and a special study was made of Hebrew syntax. Harper's *Hebrew Syntax* and Driver's *Use of the Tenses in Hebrew* were used as text-books, and reference was constantly made to other works.

During the second semester the class read Assyrian one hour weekly. The text selected was the hexagonal cylinder of Esarhaddon as published in Winckler and Abel's *Keileschrifttexte*. Especial attention was given in this work to Assyrian syntax as compared with Hebrew. The syntactical parts of Delitzsch's Grammar were supplemented by articles on special points which have been published in *Hebraica*.

A post-major course in New Testament Greek was given two hours weekly throughout the year. During the first semester one hour was devoted to a review of the materials for New Testament textual criticism and the proper methods of applying them. After a study of the leading theories as to the proper way of using the authorities for the text, the students presented in writing studies of difficult readings, through which they learned to handle the evidence themselves. The other hour during this semester was devoted to a study of the New Testament idiom, and the general principles of interpretation, and to a critical reading of the Gospel according to Mark. During the second semester, the Epistles of Paul to the Thessalonians, Galatians, Corinthians and Romans were read and interpreted. Constant reference was made throughout the course to the grammars of Winer and Buttmann and to Burton's *Moods and Tenses in New Testament Greek*. The latter work was carefully read by the class, and in the interpretation of

the text attention was constantly directed to the differences between classical and New Testament syntax. The Gospel according to John was the private reading of the class during the first semester, and the Acts of the Apostles during the second semester.

A free, elective course in the historical outlines of Christian thought was given once weekly throughout the year. The lectures began with a sketch of Christian thought at the close of the Apostolic age, traced its development through the early Christian centuries, outlining with especial care the principles which underlay Greek and Latin thought respectively, then treated mediæval scholasticism, the Reformation and the Christian thought of its formative thinkers, the principles of the early Friends, and closed with an outline of the principal elements in the thought of the eighteenth and nineteenth centuries. The instruction was given by lectures ; private reading was assigned throughout the course in the works of Fisher, Hatch, Schaff, Harnack, Stanley, Dorner, and Thomas.

### *History.*

The instruction in history has been conducted by Dr. Charles M. Andrews. Two graduate courses, occupying three hours weekly throughout the year, were given. The first course in historical methods, definition, and criticism was taken by a class of three graduate students, each of whom prepared an original paper upon some aspect of historical criticism, or presented and commented upon critical papers of well-known writers. The lectures followed the plan laid down in the program, but with important changes in arrangement, in that more time was spent on the great collections of historical material and less on the science and philosophy of history. The second graduate course, in the history of Roman law, was taken by three students and covered one hour weekly throughout the year. Special stress was laid this year on the prætorian legislation, and more time than usual was spent on the Roman legal procedure.

The work of the fellow in history has been devoted to the economic history of mediæval England. Under the direction of Dr. Andrews an investigation has been begun into the predial life upon the estates of the abbey of Ramsey in the thirteenth century.



A portion of the study, it is hoped, will soon be published, while the entire investigation will furnish material for a thesis to be presented within a year or two for the doctor's degree. The work is most creditable, and shows on the part of the fellow a special aptitude for minute and exact research.

In the undergraduate department the changes outlined in the program for last year were carried out as there stated, and instead of the full major work (consisting of two minor courses of five hours each weekly for one year), one minor course of five hours weekly to alternate with another course to be given the year following was substituted. Thus the major course, instead of being given each year, is now planned to extend over two years' time. Only five hours a week, therefore, will be devoted each year to the major work, and this plan will make it possible to give post major courses regularly each year and to add one or two new graduate courses. This increase in the number of graduate courses will add to the efficiency of the department and will make it possible to specialise more than has been done heretofore in graduate instruction.

The major work for the year consisted of lectures on the history of continental Europe from 1648 to the present time. During the first semester the class consisted of seventy-two students, three of whom were hearers; during the second semester the number was increased to eighty-one, two of whom were hearers. In consequence of the increase in numbers, a special effort was made to enlarge the hall libraries of historical reference books, begun by the students two years ago. The following books were added to the libraries: Sybel, *Founding of the German Empire* (five copies); Fyffe, *Modern Europe* (five copies); Kitchin, *History of France* (four copies); Lowell, *Eve of the French Revolution* (five copies); Rose, *Revolutionary and Napoleonic Era* (five copies); Probyn, *Italy* (five copies); Murdock, *Reconstruction of Europe* (three copies); Putzger, *Atlas* (five copies); Muller, *Recent Times* (one copy); and twenty-five volumes of the *Epoch Series*. The private reading, however, was not confined to these works. In addition, references were given to the writings of Taine, Tocqueville, Stephens, Sybel (*French Revolution*), Martin, Maurice, the memoirs of Metternich, Pasquier, and Talleyrand, the writings of Mazzini, documents in Martens, Hertslet, and the "Reprints" of the University of Penn-

sylvania. The system of essays was continued and each member of the class translated an article selected from one of the foreign historical journals. Regular monthly examinations were held on the private reading, and the results proved the usefulness of the system employed; interest in the work was maintained, and systematic reading encouraged.

In the post-major course two lectures weekly throughout the year were given on English constitutional history; these were accompanied with careful and critical reading of the texts in Stubbs, *Select Charters*, Prothero, *Constitutional Documents*, and Gardiner, *Select Documents of the Puritan Revolution*. By limiting the study to the constitutional development before 1688, it was possible to take up certain of the economic, municipal, legal, and financial aspects of English history. This was done chiefly by means of reports from members of the class on topics closely connected with the subjects touched upon in the lectures, and thus important texts in Stubbs, the Rolls Series, and Rymer's *Foedera* were brought to the notice of the class. The design of the course was to free the student as far as possible from dependence on lecturers, and to develop a familiarity with independent methods of acquiring and digesting information from scattered collections of material. For this purpose, many of the hours spent with the class were given up to practical exercises, in which the work was rather exegetical than recitative or critical. The course was taken in the first semester by five students, in the second by four.

### *Political Science.*

The courses in political science were so arranged by Dr. Lindley M. Keasbey as to make the transition from one instructor to another as easy as possible.

The minor students were given a course in general political economy as outlined by Mr. Giddings in previous programs.

The course planned by Mr. Giddings in advanced political economy, dealing with the labor problem, was also given to the major students who had gone through one year of political economy with him.

Both the minor and major classes were also given courses in economic geography and demography to fit them for the work of the coming year.

The classes were well attended and the students exhibited both interest and ability in the work.

The methods of instruction were the same as heretofore, namely, lectures, quizzes and written theses.

The instructor wishes to express his appreciation of the kindness and courtesy he has received both from the college authorities and from the students in this first year of his work. Many of the best students are going on with post-major and graduate work next year, and with the experience gained from this year's instruction in minor and major classes the instructor hopes to make the coming year's courses worthy of the high standard of the college.

No post-major or graduate courses were given in 1894-95.

### *Philosophy.*

The required course in philosophy included thirty-four students and met Dr. Dickinson S. Miller three hours weekly throughout the year. The first two months and a half were spent in studying logic, with the aid of Jevons's *Elementary Lessons*, lectures and varied exercises. This work, though not entirely without success, convinced the instructor that in so brief a course logic should be approached in quite a different manner; and this part of the course will be reorganised for next year. The second third of the year was devoted to psychology and the anatomy and physiology of the sense organs. James's briefer *Psychology* was used and some anatomical demonstrations were made. The hours were mainly given to lectures and discussion in connection with the text-book. In the last third of the year, that given up to philosophy proper, Royce's *Spirit of Modern Philosophy*, a historical sketch of philosophical thought since Descartes, was read outside by the students, while the lecture hours were wholly devoted to a discussion of some of the more important problems of philosophy itself. The discussion was led entirely by questions of the instructor or the students themselves, but the results in each subject were summed up and amplified by the instructor. This method, which had been used in the

previous year, has had such encouraging results that it will probably be extended hereafter to the logic and to parts of the psychology. Indeed it has become more and more the special endeavor of the course to draw out the students into free and ready comment and criticism. The instructor regards mere lecturing on philosophic subjects as an inferior, though sometimes necessary, substitute for the method of guided discussion.

The five-hour course, ranking as minor philosophy, was divided into a study, two hours a week, of the history of British philosophy before the nineteenth century, and a study of psychology, three hours a week, each course extending throughout the year. In psychology the course opened with a study of illusions and the theory of perception. Sully's volume on *Illusions* was supplemented by lectures. Taine's work, *On Intelligence*, was then used until the end of the first semester, the study of perception merging into that of the association of ideas and reasoning. During the second semester no reading was prescribed for the class in common, but each student was entrusted with a special subject for research, and assigned a special course of reading, the results of which were embodied in a report read to the class, and in some cases supplemented by the instructor. Students reported on "The Physiological Side of the Emotions;" "Pleasure, Pain and Desire;" "The Instinct of Imitation;" "Instinct and Habit;" "Hypnotism," and "Psychological Problems in Music." The instructor lectured on the psychology of sensation and the sense-organs, will, attention, discrimination, and association.

In the historical part of the course parts of Hobbes's *Leviathan* and Locke's *Essay Concerning Human Understanding*, the whole of Berkeley's *Principles of Human Knowledge*, Hume's *Inquiry Concerning Human Understanding*, and Locke's *Essay on the Improvement of the Understanding*, also fragments of Locke's, Berkeley's, and Hume's other work, were read and discussed in their historical and speculative aspects. In the second semester especially there was much discussion by the class.

In the second semester a free elective was offered on the problems of ethics. The class met for two hours once a week in the evening, and was conducted as a graduate seminary. Several connected problems of ethics were studied, and much and varied read-

ing was assigned. Here again the special aim of the course was to draw the students into discussion. This class included four regular students and several hearers.

There were six regular students in psychology and seven in British philosophy.

### *Mathematics.*

The graduate work in mathematics was conducted by Dr. Scott and Mr. Harkness. Dr. Scott directed the investigations and reading of the graduate students, but did not deliver formal lectures. The work of the fellow, as far as done under her superintendence, consisted of an investigation in the theory of point-groups and curves, in continuation of work begun during the preceding year at Chicago. Direction was also given to other students in reading in Salmon's *Higher Plane Curves* and in the study of cubic curves.

Graduate lectures were given by Mr. Harkness on the theory of substitution groups. In the second semester much attention was paid to Galois's theory and to Klein's polyhedral functions.

In the undergraduate work Dr. Scott met the minor class five times weekly throughout the first semester. Three or four members of the class were quite unable to do the work properly, either from lack of preparation or lack of ability. The presence of these hampered the class, so that the average results as shown in examinations and quizzes were not altogether satisfactory. But two or three members of the class showed decided ability, and speaking of the six or seven that remained in the class in the second semester, it may be said that the work was about of the average standard. In the second semester Mr. Harkness lectured on advanced algebra and trigonometry, theory of equations, and the elements of differential and integral calculus.

Mr. Harkness lectured to the class in major mathematics five hours weekly during the first semester. The work accomplished by the class was thoroughly satisfactory. In the second semester the work was conducted by Dr. Scott in strict conformity with the program. The class was rather a weak one, though for the greater part earnest and painstaking. It was not possible to get through quite as much of the analytical geometry of three dimensions as in some other years.

Dr. Scott delivered a course of post-major lectures in modern analytical geometry twice weekly throughout the year, and Mr. Harkness lectured to post-major students on infinite series and the elements of the theory of functions.

### *Physics.*

For the first time in the history of the department the graduate work was fully organised. Six students took graduate lectures. Three attended the class in the theory of optics given by Dr. A. Stanley Mackenzie; this course began with the discussion of the theories of Fresnel, Green, Cauchy, Kelvin, Rayleigh, and Maxwell. Bassett's text-book was used as a basis. Then double refraction and diffraction with special reference to gratings were discussed very fully; copious references for reading were given to the original papers referred to.

A journal meeting met regularly three times a month, and once a month a meeting of the physical seminary was held, consisting of the instructors and the most advanced students. In the journal meeting articles appearing in the current periodicals were assigned to the members, who reported upon their contents. In the seminary articles were read which had been prepared by the members from all available sources upon some special subject. These meetings have proved of great value to those students participating in them.

During the year a room in the fourth floor of Dalton Hall has been fitted with a Rowland grating; the laboratory facilities have been greatly improved, and the time of the instructors saved, by the appointment of a skilled mechanic who gives two-thirds of his time to the repairing of old apparatus and the construction of new for the department. The appliances and tools in the workshop have been considerably increased. Steam power, which was urgently needed, has been introduced during the summer.

Dr. Buckingham lectured on Thermodynamics to five graduate students, once a week during the first semester, and three times a week during the second semester. The course was designed to give students an idea of modern work, and such as could not be found in any of the text-books obtainable. It began with a short treatment of the first and second laws, after which ten or a dozen

lectures were devoted to simple applications to physics and physical chemistry. The physical problems treated were of the sort indicated in von Lang's *Theoretische Physik*, while among those in physical chemistry were van't Hoff's work on osmotic pressure and parts of Helmholtz and Nernst's work on the galvanic cell. After this preliminary work the second law was taken up again more at length, and with especial attention to generality and precision of statement. The remainder of the course treated of free energy with applications to the galvanic cell, Clapeyron's equation, the plug experiment of Joule and Thomson, etc.; the thermodynamic potential with applications to homogeneous chemical equilibrium (Gibbs' theory of dissociation in gases, etc.) and heterogeneous equilibrium (Gibbs' phase rule). Throughout the course the problems used to illustrate the theory were as varied as possible so as to show the wide range of the subject, though of course completeness in this respect was out of the question. In all cases experimental work and its results, where obtainable, were treated with the theory, and every effort was made to impress on the students the fact that the course was concerned with natural science and not with mathematics. Besides references to such text-books as von Lang, Ostwald, Nernst, Bertrand, etc., references were given as far as possible to all the original papers of importance. In this respect the work was very much hampered by the incompleteness of our library. Without the private libraries of the instructors, the course would be impossible, and the same may be said of almost any advanced course in physical chemistry or physics which we may wish to give. It is imperatively necessary that the library should own a complete set of Poggendorff's and Wiedemann's *Annalen der Physik*. These sets are already rare and the price is rising. For Dr. Buckingham's own advanced courses, which will always be largely concerned with physical chemistry, the instructor has to provide nearly all the reference works himself. The work of the journal meeting and seminary, the most important given for advanced students, is wholly dependent on the library.

The undergraduate work in the minor and major classes was carried out as outlined in the program. Dr. Mackenzie lectured on the general properties of matter, heat and electricity to the minor

class, and on mechanics and optics to the major class. Dr. Buckingham lectured on mechanics, light and sound to the minor class, and on the theories of heat and electricity to the major class, devoting some time to the applications of these theories to physical chemistry. The progress made by both classes in their laboratory work was particularly good, the minor class having also covered more ground than usual. The laboratory work is being made more satisfactory as our stock of apparatus increases. The continuous employment of a skilled mechanic is very advantageous, as it facilitates the construction of instruments designed specially for our use.

A post-major class met Dr. Mackenzie twice a week throughout the year, and heard introductory lectures on the advanced theory of electricity. The students also read privately parts of Mascart and Joubert's and Maxwell's treatises, and prepared papers upon assigned topics.

### *Chemistry.*

The total number of students in the department was seventy; of these fifty have taken the minor course, thirteen the major, four the post-major, and three the graduate courses.

As in previous years the principal feature of the year's work has been the character of the post-major and graduate courses. During the past year a seminary for post-major and graduate students was conducted by Dr. Keiser. To each of the seven students who took part in the work of the seminary selected topics in the field of theoretical chemistry were assigned for study. The results of this study were embodied in papers, and these papers were subsequently read and discussed in the meetings of the seminary. In each case an effort was made to give an accurate and exhaustive account of the present state of our knowledge in regard to the subject under consideration. Some of the topics discussed in this way were: the present position of thermo-chemistry; the laws and generalisations that have resulted from electro- and photo-chemical investigation; principles of energetics applied to chemical and physical equilibrium; mass action and chemical dynamics; the theories of solution, etc.



A course of lectures upon selected chapters of organic chemistry was given to the post-major and graduate students by Dr. Kohler. In connection with this course the graduate students gave a series of twenty historical lectures upon subjects that have been of great interest to workers in the department of chemistry.

As in previous years a journal meeting was held once a week throughout the year for the discussion of current chemical literature.

The most important part of the advanced work, however, has been the experimental work carried on in the laboratory. Investigations have been carried on upon the following subjects: the Action of Metallic Magnesium upon Organic Compounds, a preliminary account of which has been published in the *Journal of the Franklin Institute*, January, 1895, and *Chemical News*, March 8th, 1895; the Metallic Derivatives of Acetylene, preliminary paper in the *American Chemical Journal*, Vol. XIV.; the Atomic Weight of Oxygen; the Atomic Weight of Palladium; the Methods of Preparation and the Transformations of the Aliphatic Sulphonic Acids.

In the undergraduate department, three lectures weekly were given in the minor five-hour course, by Dr. Keiser upon general chemistry, one upon chemical physics, by Dr. Kohler, and one hour weekly was spent under Dr. Kohler in reviews and discussions of the more important and difficult questions dealt with in the lectures and in the laboratory work. In the lectures on general chemistry, after the fundamental ideas concerning chemical action had been discussed, a systematic study was made of the methods of preparation and the properties of typical elements and compounds; and there were introduced from time to time, as the students' knowledge of chemical facts had increased sufficiently to permit of it, brief discussions of the general laws and principles of the science. Thus the students were gradually made familiar with those general conceptions that are embraced under the terms: stoichiometrical laws, atomic and molecular theories, periodic law, theory of valence, mass action, chemical equilibrium, and theories of solution. In this way the minor class in chemistry acquired a general knowledge of those laws and principles of the science which are discussed subsequently more thoroughly and exhaustively in the major, post-major and graduate courses. In addition to these

lectures upon general and descriptive chemistry the minor students followed the course of lectures by Dr. Kohler upon chemical physics. The facts and generalisations of physics that are of especial importance to chemical students were considered in the course, and thus the first year students were prepared to take up the work of the major courses in chemistry, in which physical chemistry occupies such a prominent part. In the laboratory the minor class made a systematic study of the methods of preparation and the properties of the elements and compounds, and verified as far as possible the statements of fact made in the lecture room.

In the major course two lectures per week upon organic chemistry were given by Dr. Keiser throughout the year. The principles of classification, the properties and transformations of typical carbon compounds, were here discussed. Especial attention was given to the subject of chemical constitution, and in this connection the recent developments of the theory of valence and of stereochemistry were considered. In the laboratory work connected with this course typical organic compounds were prepared and a study was made of their more important transformations. Parallel with the course on organic chemistry there were given to the major students courses of lectures upon analytical and theoretical chemistry. The principles of qualitative and quantitative analysis formed the subject matter of the lectures delivered by Dr. Kohler upon analytical chemistry, and in connection with this course opportunity was given the students of acquiring practical experience in the operations and methods of analysis. Throughout the first semester of the major course two hours weekly were devoted to lectures by Dr. Kohler upon theoretical and physical chemistry. In these lectures a more thorough study of the principles of chemical theory was made than is possible in the first year, and the more important generalisations that have resulted from physico-chemical investigation were discussed. In the second semester one lecture a week on crystallography was given by Dr. Kohler, and for the purpose of illustrating the course one hundred glass and wooden crystal models were purchased. The acquisition of these models has greatly facilitated the work in crystallography, and has made the course more satisfactory to both instructor and students.

### *Biology.*

The graduate students in physiology have attended lectures, the journal club and seminary, and have done special work under Dr. Joseph W. Warren. One student has continued her study of the existence of the amylolytic ferment in the salivary glands of various mammals, and this research has been brought to a conclusion so far as its original purpose goes. Another studied the variation of the white corpuscles of the blood under varying physiological conditions. There has been no opportunity as yet to work over her results in such a way as to judge the outcome. She also made a study of the kidney of *Menopoma allegheniense* (*vulgo* "Hellbender"), to see if it could be used for settling certain questions concerning the secretory action of that organ. Although the final results were negative, the investigation was well worth making, and the lack of success was altogether due to experimental difficulties, whose existence could not be clearly foreseen.

During a part of the year, the Fellow in Biology continued her work, which was interrupted last year. Besides attending the lectures, and participating in the exercises of the seminary and journal club, she was occupied with the question of stimulating sensory nerves, in order to determine their power of working without fatigue. These researches have not yet been brought to a final conclusion.

Post-major work was undertaken by three students. One student had a special and brief course in the elements of the graphic method during the second semester, the others doing full work for the entire year. Another studied the milk-curdling ferment of the stomach in various animals. She also began a special investigation of the influence of temperature on the excretion of carbon dioxide in the frog. This will probably need to be continued at some later time, since in spite of her industry and patient work the number of successful experiments is probably too small.

A third post-major student was also occupied in part with the study of the milk-curdling ferment. In addition to this she began an examination of the influence of locality upon the electrical stimulation of motor nerves. This was undertaken more for the purpose of familiarising her with the method than with the view of attaining any very definite conclusions. A large share of her time

history of German literature from the earliest times to the end of the fifteenth century, and read with the class in literature selections from Old and Middle High German works in modern German translations. With Dr. Collitz the major class read critically selections from the second part of Goethe's *Faust*. The exercises in German prose composition were conducted by Dr. Blau.

For private reading the following works were assigned: in the first semester, Lessing's *Minna von Barnhelm*, *Laokoön* (selections), and *Nathan*; and in the second semester, Scheffel's *Ekkehard* (selections), Goethe's *Tasso*, and Keller's *Dietegen*.

In the minor or first year's course the lectures on literature were delivered by Dr. Collitz, who also conducted the selected reading. The lectures covered the history of Modern German literature from the middle of the last century to Goethe's death. For the selected reading the *Handbuch zur Einführung in die deutsche Litteratur*, by Hentschel and Lyon, served as a text-book. The critical reading in the first part of Goethe's *Faust* and the exercises in German prose composition were conducted by Dr. Blau.

The private reading was in the first semester Goethe's *Iphigenie*, Schiller's *Thirty Years' War* (selections) and Schiller's *Don Carlos*; in the second semester Lessing's *Emilia Galotti*, Goethe's *Egmont*, and Schiller's *Braut von Messina*.

In addition to the above classes a class in Elementary German was conducted by Miss Chamberlin, for students whose matriculation examination did not include German. The class read during the year as prepared work Hauff's *Das Kalte Herz*, Schiller's *Wilhelm Tell*, Freytag's *Journalisten*, parts of *Soll und Haben*, Schiller's *Der Neffe als Onkel*, Heine's *Harzreise*, and many poetical extracts. Numerous extracts from prose and poetical works were read at sight. Otis' grammar and parts of Thomas' grammar were studied.

### *French.*

The graduate work in French was conducted by Dr. Joseph Auguste Fontaine and Dr. Oliver M. Johnston.

The students met Dr. Fontaine three times a week. A course

on the French novel of the nineteenth century was given twice weekly. The romantic or poetic novel was studied in Chateaubriand, and the analytic and psychological in Benjamin Constant and Henri Beyle. Balzac, Flaubert, de Goncourt and Daudet were studied as examples of the realistic and natural methods of the modern French novel. A course in Old French syntax was also given once a week, in which special investigations were carried on by the students, and the earliest French texts were carefully examined, and made a basis of study. The students were also asked to write original French essays once a week on subjects selected from modern English and French literature.

Dr. Johnston conducted three hours weekly a graduate course in French Philology. The first semester of this course was occupied in the study of French phonetics. Each vowel was examined in pre-tonic, tonic and post-tonic position, and the laws governing its development as accented or unaccented were carefully noted. The phonetic history of each consonant was then traced, and the consonants classified according to their position as initial, medial or final. Consonant groups were next considered, with special reference to labial and palatal combinations. During the second semester French morphology was studied, the different modes and tenses of the verb were treated separately, and an explanation was offered for each form; the various forms of nouns, adjectives, adverbs and pronouns were examined. Two hours weekly were devoted to lectures, and one to practical exercises based on the *Chanson de Roland*.

Dr. Johnston conducted a graduate class in Old French Reading two hours weekly throughout the year. *Karls des Grossen Reise*, *Aliscons Roman de la Rose*, *Cligès* were read. Special attention was given to translation, rhythmic structure, and historical, social and literary points. The laws of syntax and idioms of Old French were also studied.

Dr. Johnston also conducted a post-major class in old French reading, twice weekly during both semesters, and read with the class the *Chanson de Roland*, *Aucassin et Nicolette*, *Karls des Grossen Reise*, and *Cligès*. In this course special emphasis was laid upon pronunciation, translation and practical syn-

tax. Attention was also called to the rhythm and the literary and social ideas of the poems.

Dr. Fontaine lectured on French literature to the major class two hours weekly throughout the year. The whole of the first semester and part of the second were taken up with the classical period. French comedy was studied in its classical origin with special attention to Corneille and Molière and a few of the preceding writers; an account was given of the old French drama and of its productions, the *mystère*, the miracle-play, the *moralité*, the *sotie* and the *farce*. The study of the French classical tragedy centered around Racine, whose *Andromaque*, *Britannicus*, *Phèdre*, and *Athalie* were carefully analysed. The prose writers of the period of Louis XIV. were also studied in the work of Descartes, La Rochefoucauld, Pascal, Bossuet, La Bruyère, Fénelon, and Massillon. Saint-Simon and his *Mémoires* will find a place next year in the course. During the second semester lectures were given on modern French literature. The writers belonging to the Parnassian school were considered. The works of Leconte de Lisle, Sully Prudhomme, François Coppée, de Hérédia and de Banville were critically examined. Also selections from Baudelaire were read and his theories explained. Finally, eight lectures were delivered on French criticism, Sainte-Beuve and Taine, and the most recent writers being treated. The students of the major course also met Dr. Fontaine three times weekly for critical reading of the classical writers, French composition and syntax; an hour was devoted to French conversation.

The students of the minor course attended twice a week during the whole year Dr. Fontaine's lectures on French literature of the eighteenth and nineteenth centuries. During the first semester the period of French Romanticism was studied, beginning with the works of Madame de Staël and Chateaubriand, and continuing with those of Lamartine, Victor Hugo, de Musset, de Vigny, Sainte-Beuve, Théophile Gautier, George Sand, Balzac, Mérimée. Other minor writers were also referred to and connected with the main representatives of that school. The aim of this course is to familiarise the students with the writers that begin the period of modern French literature, to acquaint them

with their literary theories, and later on to teach them to compare such theories with those of the classical writers. During part of the second semester a brief survey of the literature of the eighteenth century was given, and a special treatment of the novel of Lesage, Marivaux, Rousseau, Prévôt, Bernardin de Saint Pierre attempted. Of the three hours of the minor French course given by Dr. Johnston two were devoted to critical reading and one to composition. The texts read during the year were as follows: Pailleron, *Le Monde où l'on s'ennuie*; de Maistre, *Voyage autour de ma Chambre*, Alfred de Musset's *On ne saurait penser à tout*, Daudet's *Contes*, Victor Hugo's *Cromwell* and *Les Orientales*, Sandeau's *Mademoiselle de la Seiglière*, de Vigny's *Cinq-Mars*, Erckmann-Chatrian's *Les Fiancés*, George Sand's *François le Champi*, Mérimée's *Colomba*, and Balzac's *Le Curé de Tours*. The special aim of this course was to give students as much reading matter as they could carefully prepare in order that they might acquire an extensive vocabulary, and become familiar with the structure and idioms of the language. Constant practice was also given in pronunciation.

Miss Chamberlin conducted, five hours weekly, the course for beginners in French provided for those students whose matriculation examination did not include French.

### *Italian and Spanish.*

The major and minor courses in Italian and Spanish were conducted by Dr. Frederic M. Page.

The work of the class in major Italian, which met three times weekly throughout both semesters was general. The reading was as follows: Dante's *Vita Nuova*; *Divina Commedia*; about thirty cantos of the *Inferno* and *Purgatorio* (read in the second year because one member of the class had not studied Dante); Ariosto's *Orlando Furioso*, ten selected cantos; numerous shorter poems, illustrating the history of Italian lyric poetry (de Gubernatis' *Florilegio lirico*) from the thirteenth century to the beginning of the nineteenth; Alfieri's *Saul*; *I Promessi Sposi*; D'Azeglio's *I miei Ricordi*, *Ettore Fieramosca*. De Amicis' *Olanda*; extracts from

Gaspar's *Italian Literature*, bearing on subjects studied during the year; chapters from various novels for vocabulary study; and Symonds' *Introduction to Dante* for the study of Dante, were assigned as private reading. The work in grammar consisted of a review of grammatical forms, a study of the verbal system and irregular verbs, and of syntax. Sauer's grammar was used. One hour weekly was set aside for themes and translation of short stories in connection with sight reading. Italian conversation was practiced toward the end of the course as much as the time limit would allow. The work was very steady and progressive.

Dr. Page conducted the course in minor Italian for three hours weekly throughout both semesters. The class was composed of beginners. Extracts from De Amicis' prose works, Barrili's *Una notte bizzarra*, about sixty pages of Manzoni's *I Promessi Sposi*, Dante's *Divina Commedia*, fourteen selected cantos of the *Inferno*, and four cantos of the *Purgatorio* were read, translated, and commented upon. The elements of grammar were studied, namely, grammatical forms, including a full discussion of the Italian verbal system. About twenty-two so-called irregular verbs were carefully studied. Syntax was treated only in connection with reading and the requirements of composition. The English edition of Sauer's *Italian Grammar* was used. Some themes and exercises were written during the year, but this branch of study suffered necessarily in comparison with reading. It was not thought advisable to try to cover too much ground, and very little practice in conversation was possible. The results have been on the whole satisfactory. The class made good progress, and at the end of the session could read at sight any ordinary Italian.

The major Spanish course of two hours weekly throughout both semesters was attended by one graduate student only, who was able to cover a great deal of ground. Her work was concentrated upon the Spanish dramatists of the seventeenth century. She read Alarcon's *La Verdad Sospechosa*; *Las paredes oyen*; Molina's *Burlador de Sevilla*, and *La Prudencia en la mujer*; Calderon, *El Alcalde de Zalamea*; Lope de Vega, *La Estrella de Sevilla*; Rojas, *Garcia del Castanar*; her



prose reading in class was mostly at sight from Valera's *Pepita Jimenez*, and *Don Quixote*. The private reading was chosen from the works of Larra, Valera, and Cervantes. In addition Ramsay's *Spanish Grammar* was studied, and some original themes were written. A short time was devoted to conversation in Spanish, but the time limit, two hours weekly, precluded any very extensive use of oral work.

Five students attended Dr. Page's course in minor Spanish for two hours weekly throughout both semesters. Knapp's Reader, extracts from the works of "Figaro," Jose de Larra, Mesonero Romanos, Fernan Caballero, Jose Selgas, Lafuente, Burgos, Castelar, and Valera were read, and also eight chapters of *Don Quixote*. Knapp's grammar and grammar forms, including twenty-three irregular verbs, were studied by the class, and themes in Knapp's grammar translated and analysed.

#### *Semitic Languages and Biblical Literature.*

The work of this department was conducted by Dr. George A. Barton. In Semitic languages the following graduate courses were given:

The Assyrian Seminary met for two hours each week. The work for the year was Assyrio-Babylonian mythological poetry. The *Descent of Ishtar*, with the literature which has grown up about the poem, was carefully studied; the Babylonian *Creation Epic* was interpreted, and a critical study of all previous interpretations was made; about one-fourth of the *Gilgamish Epic* was studied in the same manner.

Two hours weekly were devoted to advanced Arabic. In this course an extract was read from Abû Ishâk Ahmed ibn Muhammed, the *Mu'allakât* of Imr-ul-Kais was interpreted, together with a large portion of the Arabic commentary on the same, and selections from the Qur'an were read. Syntax was studied throughout the course, and during the last few months a part of each hour was devoted to sight readings from the *Thousand and One Nights*.

A course of lectures, one hour weekly, on the History of the Arabic Caliphates and Civilisation, supplemented the work of the course on the Arabic language. The course opened with a

Two radical changes were made in the method of handling the data of the department. Cards were substituted for books on account of their greater convenience in filing personal histories, and results of examinations of vital organs, and in recording of work prescribed and later observations.

Anthropometric charts were introduced for the first time. Dr. Sargent's were selected as representing the largest number of observations. On these the freshmen's measurements were plotted, and each entering class will be supplied with these charts.

At the first meeting of the freshman class, the charts were distributed, and a lecture was given on the object, use, method of reading and personal significance. Great interest was manifested. The charts were then placed on file in the office, where they may be consulted from time to time by the students as well as the teachers.

The freshman type for this year was presented by means instead of by averages, as formerly, on account of the gain in accuracy, and the list of measures so obtained was plotted, giving the curve of the composite of the entering class of 1894.

For the three upper classes second measurements only were taken, consisting of the thirty items usually selected as the points where the most important changes occur. By aid of these alterations were made, if needed, in the prescription cards of previous years.

The class work given has been adapted to the commonest need of each class. Since not all preparatory schools have thorough physical training, it is usually necessary to give a large proportion of development and elementary coöperative work to entering classes. Therefore the free standing work of the Swedish system was used exclusively for the freshman class.

The sophomore work was of wider scope, and included use of light apparatus and a moderate amount of "heavy gymnastics."

The junior class average of physical ability proved medium, and the work given them was similar to that of the sophomore, but with advanced series of such exercises as had been given them in previous years, and with less heavy work. The exercise for both these classes was given a distinctly recreative character.

The senior class as a whole seemed to require the hygienic type of exercise with certain corrective work for carriage, and was therefore given Swedish free work.

The gymnasium has been improved during the year by the addition of a swimming pool, seventy-four by twenty feet, with a depth of three and one-half to seven and one-half feet. The control of the pool was put into the hands of the Athletic Association, and careful rules for health and safety were made and posted by them. An association of four students was authorised to give regular lessons in fancy swimming and diving, and a committee of fourteen fine swimmers, recommended by the director, were appointed to assist beginners. On two days each week the water was lowered to an absolutely safe depth for those learning to swim.

The pool was under the charge of the indoor manager of the Athletic Association, and the outdoor manager had supervision of the golf club, the autumn tennis tournament, the hare and hounds runs, and the basket ball. In addition to these, bicycling and skating were popular forms of out-door work.

The organisation of a fire brigade in each residence hall has been one work of the department. The brigades as organised numbered between twenty and thirty students in each hall, and the captains were elected by the brigade, the appointments to be confirmed by the President. When fully under way, these, too, were put wholly into the students' hands.

The closing drill in the gymnasium took place on April 4th. Three hundred invitations were issued, and nearly two hundred students appeared in the floor work. The exercises presented were representative, illustrating the class work of the year.

During April final measurements were taken as follows:

Freshmen . . . . .	56
Sophomores . . . . .	56
Juniors . . . . .	33
Seniors . . . . .	26
Graduates . . . . .	6
Total . . . . .	<hr/> 177

In May the usual spring series of basket-ball games occurred in this order, and closed the organised physical training of the year.

Freshmen *vs.* Juniors—Won by Juniors.

Freshmen *vs.* Juniors—Won by Freshmen.

Freshmen *vs.* Juniors—Won by Juniors.

Juniors *vs.* Sophomores—Won by Sophomores.

Juniors *vs.* Sophomores—Won by Sophomores.

*Tabular Statement of the Courses of Instruction given in 1894-95.*

DEPARTMENT	COURSE	INSTRUCTOR	HOURS WEEKLY	NO. IN CLASS	
				1ST SEM.	2ND SEM.
SANSKRIT AND COMPARATIVE PHILOLOGY . GREEK . . . .	<i>Graduate Classes</i>				
	Lectures on Comparative Philology	Dr. Hopkins	. 1 .	. 3 .	. 3 .
	Sanskrit . . . . .	"	. 1 .	. 2 .	. 2 .
	Elementary Greek, Grammar, Xeno- phon's Anabasis, Books I.-II., Homer's Iliad, Books I.-II. . . .	Dr. Smyth	. 5 .		. 11 .
	Homer's Odyssey, Selections from Books I.-XII, minor . . . . .	R. G. Bury	. 2 .	. 10 .	. 9 .
	Lysias, minor . . . . .	Dr. Hopkins	. 2 .	. 8 .	
	Plato, minor . . . . .	"	. 2 .		. 9 .
	Greek Prose Composition, minor .	"	. 1 .	. 8 .	. 9 .
	Lectures on the History of Greek Literature, Epic and Lyric, major	R. G. Bury	. 2 .	. 13 .	
	Lectures on History of Greek Liter- ature, Drama and Prose, major	"	. 2 .		. 13 .
	Æschylus, major . . . . .	Dr. Hopkins	. 3 .	. 11 .	
	Thucydides, major . . . . .	"	. 3 .		. 12 .
	Pindar, post-major . . . . .	"	. 1 .	. 6 .	
	Theocritus, post-major . . . . .	"	. 1 .		. 3 .
	Sophocles, post-major . . . . .	"	. 2 .	. 5 .	
	Aristotle, post-major . . . . .	Dr. Smyth	. 2 .		. 5 .
	Plato, post-major . . . . .	R. G. Bury	. 2 .		. 1 .
	New Testament Greek, post-major	Dr. Barton	. 2 .	. 2 .	. 2 .
	<i>Graduate Classes</i>				
	Thucydides and Attic Historians .	Dr. Smyth	. 4 .	. 4 .	. 5 .
LATIN . . . .	Horace, minor . . . . .	R. G. Bury	. 2 .	. 41 .	
	Horace and Vergil, minor . . . .	"	. 2 .		. 39 .
	Livy, minor . . . . .	Dr. Lodge	. 2 .	. 44 .	
	Livy and Cicero, minor . . . . .	"	. 2 .		. 43 .
	Latin Prose Composition, minor .	"	. 1 .	. 44 .	. 41 .
	Lectures on the History of Latin Literature, major . . . . .	R. G. Bury	. 2 .	. 26 .	. 19 .
	Tacitus, major . . . . .	Dr. Lodge	. 3 .	. 20 .	
	Horace, Juvenal, Tibullus, Proper- tius, major . . . . .	"	. 3 .		. 18 .
	Terence, post-major . . . . .	"	. 2 .	. 12 .	
	Plautus, post-major . . . . .	"	. 2 .		. 9 .
ENGLISH . . .	Lucretius, post-major . . . . .	R. G. Bury	. 2 .	. 6 .	
	Catullus, post-major . . . . .	"	. 2 .		. 4 .
	Latin Prose Composition, post-major	"	. 1 .	. 6 .	. 5 .
	<i>Graduate Classes</i>				
	Roman Historiography, Seminary	Dr. Lodge	. 4 .	. 4 .	. 4 .
	Lectures on the History of English Literature from the time of Shake- speare to the time of Milton, in- clusive, required . . . . .	Dr. Thomas	. 3 .	. 147 .	
	Lectures on the History of English Literature from the Restoration, exclusive of Milton, to the present time, required . . . . .	Dr. Thomas	. 3 .		. 154 .

*Tabular Statement of the Courses of Instruction given in 1894-95,  
continued.*

DEPARTMENT	COURSE	INSTRUCTOR	HOURS WEEKLY	NO. IN CLASS	
				1ST SEM.	2ND SEM.
ENGLISH . . .	Essay Work, required, first year .	Dr. Gwinn & A. Kirk	. 2 .	. 62	. 53 .
	Essay Work, required, second year	Dr. Gwinn & F. Keys	. 2 .	. 51	. 51 .
	Bright's Introduction to Anglo-Saxon Grammar and Bright's Reader, minor . . . . .	Dr. Bruce	. 3 .	. 5	
	Anglo Saxon, Bright's Reader, and Beowulf, minor . . . . .	"	. 3 .		. 5 .
	Middle English Grammar and Reading of Middle English Texts, minor . . . . .	"	. 2 .	. 2 .	. 2 .
	English Poets of the Nineteenth Century, major . . . . .	Dr. Thomas and P. Sheavyn	. 2 .	. 9 .	. 11 .
	English Essayists and Critics of the Nineteenth Century, major . . .	Dr. Gwinn	. 3 .	. 12 .	. 10 .
	Parallel Course to Nineteenth Century Criticism, major . . . .	"	. 1 .	. 3 .	. 3 .
	<i>Graduate Classes</i>				
	English Drama . . . . .	Dr. Thomas and P. Sheavyn	. 2 .	. 4 .	. 5 .
	Anglo-Saxon, Elene . . . . .	Dr. Bruce	. 2 .	. 2 .	
	Anglo-Saxon, Cædmonian Poems, Judith, etc. . . . .	"	. 2 .		. 2 .
	Anglo-Saxon, Exeter Book . . . .	"	. 2 .	. 5 .	. 5 .
	Anglo-Saxon Phonology . . . . .	"	. 2 .	. 2 .	. 2 .
	Elementary German Grammar and Translation . . . . .	R. Chamberlin	. 5 .	. 14 .	. 11 .
GERMAN . . .	Lectures on the History of German Literature from Klopstock to the present time, minor . . . . .	Dr. Collitz	. 2 .	. 20 .	. 17 .
	German Reading, Wallenstein, minor . . . . .	R. Chamberlin	. 2 .	. 21 .	
	German Reading, Faust, Pt I., minor	"	. 2 .		. 24 .
	German Prose Composition, minor	"	. 1 .	. 16 .	. 16 .
	German Conversation, minor and major . . . . .	"	. 1 .	. 20 .	. 20 .
	Lectures on the History of German Literature from the earliest times to the time of Klopstock, exclusive, major . . . . .	Dr. Collitz	. 3 .	. 8 .	. 8 .
	German Reading, Faust, Part II., major . . . . .	R. Chamberlin	. 1 .	. 10 .	
	German Reading, Goethe-Schiller Correspondence, major . . . . .	"	. 1 .		. 11 .
	German Prose Composition, major	"	. 1 .	. 9 .	. 12 .
	Middle High German, post-major .	"	. 1 .	. 1 .	
	Old High German and German Dialects, post-major . . . . .	"	. 1 .		. 1 .
	Modern German Reading, post-major . . . . .	"	. 2 .		. 1 .
	Gothic, post-major . . . . .	Dr. Collitz	. 1 .	. 1 .	. 1 .
TEUTONIC PHILOLOGY .					

*Tabular Statement of the Courses of Instruction given in 1894-95,  
continued.*

DEPARTMENT	COURSE	INSTRUCTOR	HOURS WEEKLY	NO. IN CLASS	
				1ST SEM.	2ND SEM.
TEUTONIC PHILOLOGY . . . . .	<i>Graduate Classes</i>				
	Gothic . . . . .	Dr. Collitz	1	1	2
	Old High German . . . . .	"	1	1	1
	Old Saxon . . . . .	"	1	2	2
	Old Norse . . . . .	"	1	2	2
	Introductory Teutonic Philology . . . . .	"	1	2	2
	Comparative Teutonic Philology . . . . .	"	1	2	3
FRENCH . . . . .	Elementary French, Grammar and Translation . . . . .	T. F. Colin	5	6	6
	Lectures on the History of French Literature of the Eighteenth and Nineteenth Centuries, minor . . . . .	Dr. Fontaine	2	25	34
	French Critical Reading, minor . . . . .	T. F. Colin.	1	30	28
	French Prose Composition, minor . . . . .	"	1	27	23
	French Reading and Conversation, minor . . . . .	"	1	31	29
	Lectures on French Literature of the Seventeenth, Eighteenth, and Nineteenth Centuries, major . . . . .	Dr. Fontaine	2	14	15
	French Critical Reading, major . . . . .	"	1	13	10
	French Prose Composition, major . . . . .	"	1	14	11
	French Conversation, major . . . . .	"	1	21	14
	Old French Reading, post-major . . . . .	"	1	4	4
	<i>Graduate Classes</i>				
	French Philology and Literature, Old French Epic Poetry, Old French Syntax . . . . .	"	3	2	2
	French Drama, Old French Texts, Versification and Metrics . . . . .	"	2	1	1
	Italian Grammar, Composition and Critical Reading, minor . . . . .	F. M. Page	3	5	2
	Italian Grammar, Composition and Critical Reading, minor . . . . .	"	3		
	Italian Literature, Grammar, Composition, and Critical Reading, major . . . . .	"	3	3	3
SPANISH . . . . .	Spanish Grammar, Composition and Critical Reading, minor . . . . .	"	2	6	6
	Spanish Literature, Grammar, Composition and Critical Reading, major . . . . .	"	2	1	1
	<i>Graduate Classes</i>				
	Spanish Syntax, Composition and Literature, Origin of Spanish Drama and Dramatists, Dramas of the Sixteenth and Seventeenth Centuries . . . . .	"	2	1	1
SEMITIC LANGUAGES AND BIBLICAL LITERATURE	Elementary Hebrew . . . . .	Dr. Barton	2	1	1
	Advanced Hebrew . . . . .	"	3	2	

*Tabular Statement of the Courses of Instruction given in 1894-95,  
continued.*

DEPARTMENT	COURSE	INSTRUCTOR	HOURS WEEKLY	NO. IN CLASS	
				1ST SEM	2ND SEM.
SEMITIC LANGUAGES AND BIBLICAL LITERATURE	Old Testament Seminary . . . . .	Dr. Barton	. 1 .	. 1 .	. 1 .
	Assyrian . . . . .	"	. 1 .		. 1 .
	The History of Israel . . . . .	"	. 2 .	. 2 .	. 1 .
	The Cuneiform Inscriptions and the Old Testament . . . . .	"	. 1 .	3 .	. 2 .
	Patristic Greek . . . . .	"	. *2 .	. 1 .	
	Patristic Greek . . . . .	"	. †1 .		. 1 .
	Historical Outlines of Christian Thought . . . . .	"	. 1 .	. 6 .	. 8 .
HISTORY . . .	New Testament Seminary . . . . .	"	. 1 .	. 1 .	. 1 .
	Modern History, from the Treaty of Westphalia to the close of the Napoleonic Campaigns, minor . .	Dr. Andrews	. 5 .	. 74 .	
	Modern History, from the Congress of Vienna to the present time, minor . . . . .		. 5 .		. 80 .
	English Constitutional History, post-major . . . . .	"	. 2 .	. 5 .	. 4 .
	<i>Graduate Classes</i>				
	Historical Definition, Method and Criticism . . . . .	"	. 2 .	. 3 .	. 3 .
	History of the Roman Law . . . . .	"	. 1 .	. 3 .	. 3 .
POLITICAL SCIENCE . .	Principles of Economics, minor .	Dr. Keasbey	. 5 .	. 26 .	
	Economic Geography and Demography, minor . . . . .	"	. 5 .		. 26 .
	The History of Labor and Capital, major . . . . .	"	. 5 .	. 22 .	. 21 .
	Logic and Psychology, required .	Dr. Miller	. 3 .	. 33 .	
PHILOSOPHY .	Psychology and Philosophy, required . . . . .	"	. 3 .		. 36 .
	Lectures on Christian Ethics, required . . . . .	Dr. Rhoads	. 2 .	. 39 .	
	Lectures on the Origin and Contents of the Books of the Bible, required . . . . .	Dr. Barton	. 2 .		. 39 .
	Psychology, minor . . . . .	Dr. Miller	. 3 .	. 10 .	. 6 .
	British Philosophy of the Seventeenth and Eighteenth Centuries, minor . . . . .	"	. 2 .	. 8 .	. 8 .
	Ethics, free elective . . . . .	"	. 2 .		. 3 .
	Trigonometry, required . . . . .	J. Harkness	. 3 .	. 15 .	
MATHEMATICS	Solid Geometry, required . . . . .	Dr. Scott	. 2 .		. 9 .
	Analytical Conics, minor . . . . .	"	. 5 .	. 11 .	
	Algebra, Advanced Trigonometry, and Theory of Equations, and Elementary Differential and Integral Calculus, minor . . . . .	J. Harkness	. 5 .		. 7 .
	Differential and Integral Calculus, Differential Equations, major . .	"	. 5 .	. 5 .	
	Curve Tracing, Analytical Geometry of Three Dimensions, major . .	Dr. Scott	. 4 .		. 4 .

\* First half of first semester.

† Second half of first semester, and second semester.

*Tabular Statement of the Courses of Instruction given in 1894-95,  
continued.*

DEPARTMENT	COURSE	INSTRUCTOR	HOURS WEEKLY	NO. IN CLASS	
				1ST SEM.	2ND SEM.
MATHEMATICS	History of Mathematics, major . .	Dr. Scott	. 1 .		. 4 .
	Modern Analytical Geometry, post- major . . . . .	"	. 2 .	. 4 .	. 3 .
	Elements of the Theory of Func- tions, post-major . . . . .	J. Harkness	. 2 .	. 3 .	. 2 .
	<i>Graduate Classes</i>				
	Individual Seminary Work . . . .	Dr. Scott	. 4 .	. 3 .	
	Individual Seminary Work . . . .	"	. 3 .		. 2 .
PHYSICS . . . .	Theory of Groups . . . . .	J. Harkness	. 2 .	. 2 .	. 1 .
	Laws and Properties of Matter, Heat, Mechanics, minor . . . . .	Drs. Mackenzie and Buckingham	. 5 .	. 11 .	
	Electricity and Magnetism, Light and Sound, minor . . . . .	"	. 5 .		. 10 .
	Laboratory Work, minor . . . . .	"	. 4 .	. 11 .	. 10 .
	Theory of Electricity, Problems in Mechanics, major . . . . .	"	. 5 .	. 3 .	
	Theory of Heat, Theory of Light, Theory of Sound, major . . . . .	"	. 5 .		. 3 .
	Laboratory Work, major . . . . .	"	. 5 .	. 3 .	. 3 .
	Theory of Electricity and Magne- tism, post-major . . . . .	Dr. Mackenzie	. 2 .	. 1 .	. 3 .
	Laboratory Work, post-major . . .	"	. 5 .	. 1 .	. 3 .
	<i>Graduate Classes</i>				
	Physical Optics . . . . .	"	. 3 .	. 3 .	. 2 .
	Thermodynamics . . . . .	Dr. Buckingham	. 1 .	. 3 .	
CHEMISTRY . .	Introduction to General Chemistry (Lectures), minor . . . . .	Dr. Keiser	. 3 .	. 48 .	
	General Chemistry (Lectures), minor Reviews and Chemical Physics, minor . . . . .	"	. 3 .		. 50 .
	Laboratory Work, minor . . . . .	Dr. Kohler	. 2 .	. 48 .	. 50 .
	Lectures on Organic Chemistry, major . . . . .	Drs. Keiser and Kohler	. 5½ .	. 48 .	. 50 .
	Lectures on Theoretical Chemistry, major . . . . .	Dr. Keiser	. 2 .	. 14 .	. 12 .
	Lectures on Inorganic Chemistry, major . . . . .	Dr. Kohler	. 1 .	. 12 .	
	Lectures on Inorganic Chemistry and Quantitative Analysis, major Laboratory Work, major . . . . .	"	. 2 .	. 12 .	
	Advanced Organic Chemistry, post- major and graduate . . . . .	"	. 3 .		. 12 .
	Theoretical and Physical Chemistry, post-major and graduate . . . .	Drs. Keiser and Kohler	. 5½ .	. 12 .	. 12 .
	Laboratory Work, post-major and graduate . . . . .	Dr. Kohler	. 1 .	. 3 .	. 3 .
	Seminary Work . . . . .	Dr. Keiser	. 2 .	. 6 .	. 6 .
		Drs. Keiser and Kohler		. 6 .	. 6 .
		Dr. Kohler	. 1 .	. 6 .	. 6 .
BIOLOGY . . .	Lectures on General Biology, minor	Drs. Harrison and Randolph	. 5 .	. 30 .	
	Lectures on Plants, Vertebrates and Embryology, minor . . . . .	Drs. Warren, Har- rison, and Ran- dolph	. 5 .		. 28 .



*Tabular Statement of the Courses of Instruction given in 1894-95,  
continued.*

DEPARTMENT	COURSE	INSTRUCTOR	HOURS WEEKLY	NO. IN CLAS	
				1ST SEM.	2ND SEM.
BIOLOGY . . .	Laboratory Work, minor . . . . .	Drs. Harrison and Randolph	. 5½ .	. 30 .	. 28 .
	Animal Physiology, major . . . . .	Dr. Warren	. 5 .	. 15 .	
	Laboratory Work, major . . . . .	"	. 5½ .	. 15 .	
	General Zoölogy, Theoretical Biology, major . . . . .	Drs. Warren and Harrison	. 5 .		. 12 .
	Laboratory Work, major . . . . .	"	. 5½ .		. 12 .
	Lectures on the Central Nervous System, post-major . . . . .	Dr. Warren	. 1 .	. 2 .	. 2 .
	Laboratory Work, post-major . . .	"		. 2 .	. 2 .
	<i>Graduate Classes</i>				
	Advanced Biology . . . . .	Dr. Harrison	. 1 .	. 4 .	. 4 .
	Physiology . . . . .	Dr. Warren	. 1 .	. 3 .	. 3 .
	Physiological Laboratory Work . .	"		. 3 .	. 3 .
	Journal Club . . . . .	Drs. Warren, Harrison and Randolph	1 hour frtnghtly	. 3 .	. 3 .
	Seminary Work . . . . .	"	1 hour frtnghtly	. 3 .	. 3 .

### *Report of the Librarian.*

#### *To the President :*

THE additions to the library during the year have been one thousand three hundred and ninety volumes from the regular library sources. In addition, six thousand four hundred and eighty-three volumes of the Sauppe collection, given by Miss Mary E. Garrett, of Baltimore, in 1894, have been catalogued and placed upon the shelves, making the total number of volumes in the library twenty-one thousand four hundred and fifty-seven. The duplicate volumes of the Sauppe collection have been sold for the sum of nine hundred dollars, and this amount has, by the generosity of the donor, been added to the library resources for the purchase of books. One hundred and sixty-four periodicals are taken by the library. Again an earnest plea for a separate library building is made. Much inconvenience has been caused during the year by the necessity of placing books in the class rooms, the shelving space in the library being insufficient. The floor space for readers has been wholly inadequate. The unavoidable noise of the coming and going of students in the limited room that our present quarters offer has been a serious interference to work, and makes doubly difficult the work of the librarian. A separate library building is urgently needed.

The library is open daily from 8 a.m. to 10 p.m. The following gifts have been received by the Library during the year, and are herewith gratefully acknowledged :

American Swedenborg Printing and Publishing Company : Swedenborg's Works, 23 volumes.

Anonymous : Facsimile of E. B. Browning's last poem, "The North and the South ;" "Historic Churches of America."

Mr. Thomas Balch : "French in America," given by the author.

Miss Cora A. Benneson : "Journal of American Folk Lore," 1892, 1893, 1894, 3 volumes ; and subscription for 1895.

Mr. H. B. Carrington : "Beacon Lights of Patriotism," given by the author.

Mr. Howard Comfort: Wagstaff, "History of Friends ;" Memorials of Admiral Penn ; Sturges' Memoirs ; Penn's Works, first royal folio edition ; Mrs. Hemans' Poetical Works, 6 volumes ; Memoirs of Whitehead, 2 volumes ; Tukes, "Principles of Quakers ;" Lyell, "Geology," 2 volumes ; Fox's Journal ; Bates, "Doctrines of Friends ;" Barclay's Works ; Gurney's Memoirs ; "Life of Mary Dudley ;" Bickley, "George Fox ;" Bayly's Works ; Collection of Testimonies ; Churchman's Journal ; Bibliotheca Antiquakeriana ; Shackleton's Memoirs ; Kelty, "Primitive Quakers ;" Whiting's Memoirs ; "Personal Memoirs of U. S. Grant," 2 volumes.

Mr. Francis R. Cope : Toy, "Religions of Israel ;" "Ante-Nicene Library of the Fathers," 11 volumes ; Harper, "Assyrian Letters ;" Bacon, "Exodus ;" Crutwell, "History of Latin Christianity ;" Harmack, "Gesch. d. Altchristlichen Literatur," volume 1 ; Tischendorf, "Novum Testamentum Graece," volumes 2 and 3 ; Weiss, "Einleitung in d. neue Testament."

Miss Sarah Eddy : Salt, "Animals' Rights."

Mr. G. W. Egleston : Thomas Egleston, "Life of John Paterson."

Miss Mary E. Garrett : Gray, "Absolute Measurements in Electricity ;" Preston, "Theory of Heat ;" Thomson, "Recent Advances in Electricity," "Applications of Dynamics to Physics and Chemistry ;" Bassett, "Physical Optics ;" Thomson and Tait, "Elements of Natural Philosophy," "Treatise on Natural Philosophy ;" Watts, "Index of Spectra and Appendices ;" Mascart, "Optique ;" Poincaré, "Théorie mathématique de la lumière," "L'électricité et optique ;" Duhem, "Mécanique chimique ;" Lippmann, "Thermodynamique ;" Lorenz, "Die Lehre vom Licht ;" Ostwald, "Outlines of General Chemistry," "Solutions ;" Peddie, "Manual of Physics ;" Carhart, "Primary Batteries ;" Glazebrook, "Properties of Matter ;" Scheiner, "Astronomical Spectroscopy ;" Jones, "Electric Waves ;" Gänge, "Anleitung zu Spectralanalyse ;" Lang, "Anleitung in d. theoret. Physik."

Dr. Mary M. Gwinn : Arnold, "Discourses in America," 2 volumes ; "Mixed Essays," 4 volumes.

The Howard Association : Render, "Through Prison Bars."

Miss Charlotte F. McLean : Allen, "Physiological Æsthetics."

Miss Anna Rhoads : Princeton Review, 1878-1883 ; New Princeton Review, 1886-1887.

The late Dr. James E. Rhoads : Stone, "Birds of Eastern Pennsylvania and New Jersey."

Miss E. Rogers : Rogers, "Emendations in Æschylus."

Dr. Charlotte Angas Scott : "Plane Cubics," "Modern Ideas and Methods in Plane Analytical Geometry," given by the author.

President M. Carey Thomas : Cornell Studies in Classical Philology, No. 3 ; Goldsmith, "Deserted Village ;" Shakespeare, "Merchant of Venice," ed. by Bates.

University of Vermont : Marsh Library Catalogue.

Mr. Horace G. Wadlin : Massachusetts Bureau of Labor Statistics Publications.

Dr. James W. Warren : Dalton, "Experimental Method in Medical Science."

In addition the Library received many publications of the United States Government and many State publications, as well as many books from various publishing houses, some of which are here enumerated : Baker, "Short Courses in Chemistry," "Natural Philosophy ;" Bradley and Eaton, "Practical Arithmetic ;" Gillet and Rolfe, "Natural Philosophy ;" Greenleaf, "Complete Arithmetic ;" Keetels, "Analytical French Reader ;" Kiddle, "Text-Book of Physics ;" MacGregor, "Kinematics and Dynamics ;" May, "Anatomy ;" Nobile, "An Anonymous Letter," from the Italian ; Olney, "Complete Algebra," "University Algebra ;" Robinson, "Elementary Algebra," "University Algebra ;" Roscoe, "Elementary Chemistry ;" Sauveur, "L'enseignement des langues vivantes," "Fables de la Fontaine," "Contes merveilleux," "Petite Grammaire Francaise," "Talks with Caesar ;" Scudder, "History of the United States ;" Stewart, "Elementary Physics ;" Wentworth, "Elements of Algebra," "Elements of Plane and Solid Geometry ;" Worman, "First French Book," "L'écho de Paris," "Questionnaire," "Erstes deutsches buch," "Zweites deutsches buch ;" Worman and Rougement, "Teachers' Handbook and Grammaire Francaise."

Respectfully submitted,

FLORENCE E. PEIRCE, *Librarian.*

## *Fellowships and Scholarships Conferred for the Year 1895-96.*

- FLORENCE LEFTWICH, . . . . . *Bryn Mawr European Fellow.*  
Baltimore, Md. Wellesley College, 1884-85; A.B., Bryn Mawr College, 1895. Student in Romance Languages, Sorbonne and Collège de France, 1895-96.
- EDITH HAMILTON, . . . . . *Mary E. Garrett European Fellow.*  
Fort Wayne, Ind. A.B. and A.M., Bryn Mawr College, 1894. Fellow in Latin, Bryn Mawr College, 1894-95; Student in Greek and Latin, University of Leipsic, 1895-96.
- ELEANOR PURDIE, . . . . . *Fellow in Greek.*  
London, England. Newnham College, University of Cambridge, England, 1890-94; Classical Tripos, Part I, First Class, 1893; Part II., 1894. Holder of the Marion Kennedy Studentship, and Student in Indo-European Philology, University of Freiburg, 1894-95.
- JENNETTE ATWATER STREET, . . . . . *Fellow in Latin.*  
Toronto, Canada. A.B., University of Toronto, 1895.
- PHOEBE A. B. SHEAVYN, . . . . . *Fellow in English.*  
Atherstone, England. Scholar, University College of Wales, Aberystwith, Wales, 1887-89 and 1892-94; A.B., University of London, 1889, and A.M., 1894. Member of Governing Court of University of Wales, 1894; Reader in English, Bryn Mawr College, 1894-95.
- MINNA STEELE SMITH, . . . . . *Fellow in German and Teutonic Philology.*  
Edinburgh, Scotland. Newnham College, University of Cambridge, England, 1890-94; Mediæval and Modern Language Tripos, University of Cambridge, First Class, 1893. Fellow in German and Teutonic Philology, Bryn Mawr College, 1894-95.
- ANNA LEWIS COLE, . . . . . *Fellow in Romance Languages.*  
Baltimore, Md. A.B., Woman's College of Baltimore, 1892, and A.M., 1894. Student in English and French, Sorbonne, 1894-95.
- ELEANOR LOUISA LORD, . . . . . *Fellow in History.*  
Malden, Mass. A.B., Smith College, 1887, and A.M., 1890. Fellow in History, Bryn Mawr College, 1889-90; Instructor in History, Smith College, 1890-94; Student in History, Newnham College, University of Cambridge, England, 1894-95.
- EMILIE NORTON MARTIN, . . . . . *Fellow in Mathematics.*  
Ardmore, Pa. A.B., Bryn Mawr College, 1894. Graduate Student in Mathematics, Bryn Mawr College, First Semester, 1894-95; Teacher of Latin in the Bryn Mawr School, Baltimore, Md., January-June, 1895.
- MARY PETTY, . . . . . *Fellow in Chemistry.*  
Greensboro, N. C. S.B., Wellesley College, 1885. Teacher of Latin, Guilford College, 1888-93; Teacher of Chemistry and Physics, State Normal School, Greensboro, 1893-95.
- CLARA LANGENBECK, . . . . . *Fellow in Biology.*  
Cincinnati, O. Ph.G., Cincinnati College of Pharmacy, 1890; S.B., University of Cincinnati, 1895.
- EVANGELINE ST. CLAIR CHAMPLIN, . . . . . *Graduate Scholar in English.*  
Alfred, N. Y. L.B., Alfred University, 1887, and Lit. M., 1888. Graduate Student in English, Bryn Mawr College, 1891-92.
- JESSIE DARLING, . . . . . *Graduate Scholar in French and Italian.*  
Toronto, Canada. A.B., University of Toronto, 1895.
- LUCY FRANCISCO, *Earlham Graduate Scholar in Mathematics and Chemistry.*  
Richmond, Ind. S.B., Earlham College, 1895.
- FANNY COOK GATES, . . . . . *Graduate Scholar in Mathematics.*  
Waterloo, Ia. L.B., Northwestern University, 1894, and L.M., 1895. Fellow in Mathematics, Northwestern University, 1894-95.

HENRYANNA CLAY HACKNEY, *Guilford Graduate Scholar in Greek and English.*

Guilford College, N. C. A.B., Guilford College, 1895.

EMILY BEVAN HARRINGTON, . . . . . *Graduate Scholar in English.*

Halifax, N. S. A.B., Dalhousie College and University, 1892, and A.M., 1894.

HARRIET FRAZIER HEAD, . . . . . *Graduate Scholar in Biology.*

Philadelphia, Pa. A.B., Bryn Mawr College, 1891. Teacher of Latin in Mrs. E. L. Head's School, Germantown, Philadelphia, 1891-94.

HELEN DEAN KING, . . . . . *Graduate Scholar in Biology.*

Owego, N. Y. A.B., Vassar College, 1892. Graduate Student in Biology, Vassar College, and Assistant in the Biological Laboratory, 1894-95.

DOROTHY WILBERFORCE LYON, . . *Graduate Scholar in Teutonic Philology.*

Elizabeth, N. J. A.B., Wells College, 1887. Graduate Student in English, Bryn Mawr College, 1887-89, and First Semester, 1892-93, and Graduate Scholar in English, 1893-94; Head Teacher of English, and Teacher of History, at the Randolph-Harrison School, Baltimore, Md., 1894-95.

ELLA R. NAYLOR, . . . . . *Penn Graduate Scholar in Biology.*

New Sharon, Ia. S.B., Penn College, 1895.

FLORENCE PEEBLES, . . . . . *Graduate Scholar in Biology.*

Lutherville, Md. A.B., Woman's College of Baltimore, 1895.

INEZ L. RIGGS, . . . *Graduate Scholar in German and Teutonic Philology.*

Columbia, Mo. L.B., University of the State of Missouri, 1894, and L.M., 1895.

CAROLINE TAYLOR STEWART, . . . *Graduate Scholar in German and French.*

Negunee, Mich. A.B., University of Kansas, 1891; A.M., University of Michigan, 1895.

EMMA STANSBURY WINES, . . . . . *Graduate Scholar in Philosophy.*

Springfield, Ill. Wellesley College, 1889-90; A.B., Bryn Mawr College, and George W. Childs Prize Essayist, 1894. Teacher of English and History in the Walton School, Philadelphia, 1894-95.

LYDIA MITCHELL ALBERTSON, . . . . . *Foundation Scholar.*

Philadelphia, Pa. Prepared by the Friends' Select School, Philadelphia. Foundation Scholar, Bryn Mawr College, 1893-95.

GÉRTRUDE ORREN HUNNICUTT, . . . . . *Foundation Scholar.*

Lawrence, Kan. A.B., University of Kansas, 1889. Graduate Student in Greek and French, University of Kansas, 1889-90; Assistant in the Newberry Library, Chicago, Ill., 1892-93; Graduate student in German and Political Science, Bryn Mawr College, Second Semester, 1894-95; Foundation Scholar, Bryn Mawr College, 1894-95.

EVELYN HUNT, . . . . . *Anna Powers Memorial Scholar.*

Philadelphia, Pa. Prepared by the Friends' Central School, Philadelphia.

ALICE ANN MENDENHALL, . . . . . *Foundation Scholar.*

Bloomington, Ind. A.B., Earlham College, 1890. Teacher of Latin and Mathematics in the Bloomington Academy, 1890-94; Graduate Student in Semitic Languages and New Testament Greek, University of Chicago, 1894-95.

ALICE J. VAIL, . . . . . *Foundation Scholar.*

Pasadena, Cal. Prepared by Westtown Boarding School. Foundation Scholar, Bryn Mawr College, 1894-95.

HETTIE EVANS WILLITS, . . . . . *Foundation Scholar.*

Haddonfield, N.J. Prepared by Westtown Boarding School. Foundation Scholar, Bryn Mawr College, 1894-95.

## *Degrees Conferred During the Academic Year 1894-95.*

### *Doctor of Philosophy.*

MARTHA BUNTING, of Philadelphia.

B.L., Swarthmore College, 1882; University of Pennsylvania, 1888-91; Graduate Student in Biology, Bryn Mawr College, 1891-93; Assistant in Biology, Woman's College, Baltimore, 1893-95. Subjects: Morphology and Physiology. Thesis: The Origin of the Sex-Cells in Hydraetia and Podocoryne and The Development of Hydraetia.

### *Master of Arts.*

MARY BIDWELL BREED, of Pittsburg.

A.B., Bryn Mawr College, 1894; Holder of the Bryn Mawr European Fellowship, 1894-95; Graduate Student in Chemistry, Bryn Mawr College, 1894-95. Chief Subject: Chemistry.

### *Bachelor of Arts.*

HELEN MIDDLETON, of Pennsylvania.

Prepared by Mrs. E. L. Head's School, Germantown, Philadelphia. Group: History and Political Science. The work for this degree was completed in February, 1895.

MARY JANNEY ATKINSON, of Pennsylvania.

Wellesley College, 1888-90. Group: Chemistry and Biology.

ELIZABETH CONWAY BENT, of Harrisburg.

Prepared by Mlle. de Bonneville's School, Philadelphia. Group: Greek and Latin.

ANNE CAROLINE COLEMAN, of Philadelphia.

Prepared by Miss Irwin's School, Philadelphia, and by private study. Group: Chemistry and Biology.

MARY FRENCH ELLIS, of Philadelphia.

Prepared by Miss Boyer's School, Philadelphia. Group: Chemistry and Biology.

MARY FLEXNER, of Kentucky.

Prepared by the Girls' High School, Louisville, and by private study. Group: History and Political Science.

SUSAN FOWLER, of Baltimore.

Prepared by St. Timothy's School, Catonsville, Md. Group: Greek and Latin.

ROSALIE ALLAN FURMAN, of Indiana.

Prepared by the Evansville High School, and by private study. Group: Chemistry and Biology.

ANNETTE LOUISE HALL, of Philadelphia.

Prepared by the Friends' Central School, Philadelphia, and by private study. Group: Greek and Latin.

MADELINE VAUGHAN HARRIS, of Philadelphia.

Prepared by Mrs. E. L. Head's School, Germantown. Group: Latin and German.

MARY HARRIS, of Philadelphia.

Prepared by Miss Mary E. Stevens's School, Germantown, Philadelphia. Group: Mathematics and Physics.

MARY DENVER JAMES, of Ohio.

Philosophical Course, Wooster University, 1890-91. Group: Latin and French.

MARIANNA JANNEY, of Philadelphia.

Prepared by the Friends' Central School, Philadelphia, and by Miss Mary E. Stevens's School, Germantown, Philadelphia. Group: Latin and German.

**MARY JEFFERS, of Pennsylvania.**

Classical Course, Wellesley College, 1885-86. Teacher of Latin and Greek, York Collegiate Institute, York, Pa., 1893-95. Group: Greek and Latin.

**MARTHA DIVEN LAPORTE, of Pennsylvania.**

Prepared by the Mountain Seminary, Birmingham, Pa. Group: Greek and Latin.

**FLORENCE LEFTWICH, of Baltimore.**

Wellesley College, 1884-85. Group: Latin and French.

**JESSIE LIVINGSTON LOUDERBACK, of New York City.**

Prepared by Miss Jaudon's School, New York City. Group: History and Political Science.

**ZELINDA NEVILLE, of Kentucky.**

Prepared by private study and Miss Mary E. Stevens's School, Germantown, Philadelphia. Group: Greek and Latin.

**EDITH PETTIT, of Philadelphia.**

Prepared by Miss Irwin's School, Philadelphia. Group: Latin and English.

**MARGARET HILLES SHEARMAN, of Wilmington.**

Prepared by the Misses Hebb, Wilmington, and by Miss Mary E. Stevens's School, Germantown, Philadelphia. Group: History and Political Science.

**HARRIET RIDGWAY SHREVE, of New Jersey.**

Prepared by Miss Pomeroy and Mrs. Sudler, Plainfield, and by private study. Group: Latin and Mathematics.

**BERTHA SZOLD, of Baltimore.**

Prepared by the Misses Adams's School, Baltimore. Group: Latin and English.

**LYDIA LOIS TILLEY, of Virginia.**

Norfolk Country, Va. Prepared by the Hemenway High School, and by private study. Group: Mathematics and Physics.

**ANN MARTHA WALKER, of Pennsylvania.**

Prepared by Darlington Seminary, West Chester, Pa., and by Miss Mary E. Stevens's School, Germantown, Philadelphia. Group: Greek and Latin.

**MARGARET WARNER, of Connecticut.**

Prepared by the High School, Hartford. Group: History and Political Science.



*A Tabular Statement of the Increase in the Number of Students and of the Degrees Conferred during the Ten Years from 1885 to 1895.*

	Graduate Students.	Under- graduates.	Total number.	A.B.	A.M.	Ph.D.
1885-86,	8	36	44			
1886-87,	10	54	64			
1887-88,	8	70	78	1		1
1888-89,	16	100	116	24		
1889-90,	22	100	122	15	1	
1890-91,	12	120	132	11	1	1
1891-92,	27	142	169	16	1	1
1892-93,	34	168	202	29	1	1
1893-94,	43	200	243	22	9	1
1894-95,	49	234	283	26	1	1

*Tabular Statement of the Distribution of Students in the various Departments of Study during the ten years from 1885 to 1895.*

	Sanskrit and Comparative Philology.	Greek.	Latin.	English Literature.	Anglo-Saxon.	German.	Teutonic Philology.	French.	Romance Philology.	Italian.	Spanish.	Semitic Languages and Biblical Literature.	History.	Political Science.	Philosophy.	History of Art.	Mathematics.	Physics.	Chemistry.	Biology.
1885-86,		30	18	32		7		10	1	2			8				32		10	10
1886-87,	1	20	24	39		17	1	3	2		2		15		19		29		6	22
1887-88,	1	28	36	39	3	42	4	25	2	2	4			13	45		12	11	16	25
1888-89,	2	40	35	67	7	50	4	26			1		63	17	16		23	10	10	27
1889-90,	6	46	58	76	9	44	4	21		1	1		34	24	20		28	7	11	26
1890-91,	1	42	59	86	6	46	3	23		4	1		54	30	16		35	6	24	26
1891-92,	2	36	75	92	8	46	1	28	1	5	1		46	40	28	12	24	7	31	42
1892-93,	4	38	45	135	10	60	2	30	1	8	4	4	57	54	28	19	27	27	45	42
1893-94,	4	44	80	156	15	71	3	50	1	10	5	7	53	70	52		32	20	45	47
1894-95.	5	51	91	170	10	75	6	83	5	8	9	12	86	53	57		34	20	71	53

*Gifts Received by the College during the Year 1895-96.*

The following gifts have been received during the past year in addition to the gifts of special books to the library, which are enumerated and acknowledged in the report of the librarian. The sincere gratitude of the College is due to the liberal donors who have so greatly increased its facilities for usefulness.

From Justus C. Strawbridge:

A bronze bust of the late Dr. James E. Rhoads, larger than life, executed by the sculptor, Mr. John Boyle, of Philadelphia.

A Numidian marble bracket and niche for the bust.

The sum of \$244.50 to be expended on grading newly acquired property.

From Miss Ethel Powers :

The Anna Powers Memorial Scholarship of \$200.

Contributions to the Swimming Tank as follows:

From the Treasurer of the Alumnae Association of Bryn Mawr College, amount raised by the alumnae, students and others, \$1,757.49

From Miss Mary E. Garrett, . . . . . 1,500.00

From anonymous contributors, . . . . . 12.50

NOTE.—The total cost of the Swimming Tank was \$3,553.17, leaving the sum of \$284.85 to be paid out of the funds of the College.

From Miss Mary E. Garrett :

Kennedy Lot, Ground Rent, . . . . . \$2,269.74

Mary E. Garrett Scholarships, . . . . . 1,400.00

Mary E. Garrett European Fellowship, . . . . . 500.00

Expenses of Sauppe Library, . . . . . 1,596.28

Special Fund of \$1,000 for apparatus and books, 1,000.00

A fund of \$1,300 for the equipment of the Art Department, including photograph cases, to be expended in 1895-96.

From a friend of the College :

A graduate scholarship of \$100.

From Dr. Hermann Collitz :

A framed photograph of Professor Sauppe, to be hung in the Library.

From the Undergraduate Association of Bryn Mawr College :  
 A Memorial Fund of \$350 raised in honor of the late Dr. James E. Rhoads, for the purchase of books on art, under the direction of the head of the Department of Art and Archæology.

From His Majesty the King of Siam :

“The Tripitaka,” a Siamese edition of the sacred writings of the Southern Buddhists, in thirty-eight volumes.

Gifts of money, amounting in all to over four thousand dollars, were received from friends, who requested that their names should not be mentioned, for special objects enumerated below :

Printing of Alumnæ Health Statistics ; Professor Sauppe's Bust in Plaster ; Purchase of Caps and Gowns to be rented to students at Conferring of Degrees ; Graduate Club Room ; Board walks in College Grounds ; College contribution toward Merion Avenue ; Changing grade at Pembroke Entrance ; Workshop ; Express Wagon ; Scales ; Fire Equipment ; Lightning Rods ; Salary of Physical Instrument Maker ; Cost of Memorial Services ; New Steam Pump in Boiler House.

*Addresses Delivered in the Year 1894-95.*

*Before the College:*

MR. THOMAS COCHRAN, "Football at Yale."

LADY HENRY SOMERSET, "Franchise of Women."

MRS. ALICE FREEMAN PALMER, "Progress in Women's Education."

DR. HENRY HARTSHORNE, "Japan before the War."

*Before the Graduate Club:*

MR. JOHN FOSTER KIRK, "A Study from Macbeth."

DR. Y. J. FINDLAY, "Pedagogy and the High Training of Teachers."

MRS. RHYS-DAVIS, "Women in Buddhism."

MRS. CHRISTINE LADD FRANKLIN, "The Retina of the Eye."

DR. DICKINSON SERGEANT MILLER, "Mr. Balfour's 'Foundations of Belief.'"

*Before the Philosophical Club:*

PROFESSOR WILLIAM PALMER, "Ethics and the Law."

PROFESSOR JOSIAH ROYCE, "Some Anomalies of Self-Consciousness."

PROFESSOR FULLERTON, "The Educational Value of Moral Studies."

*Before the De Rebus Club:*

MR. CHARLES DUDLEY WARNER, "American Literature."

MR. CHARLES COPELAND, "Hamlet on the Stage."

MR. HERAUT OL. KIRETCHGIAN, "The Situation in Armenia."

MR. WILLIAM M. SALTER, "The Late Pullman Chicago Strike."

MR. HERBERT WELSH, "The New Reform and our Duty toward it."

*Before the College Settlement Association:*

DR. JANE ROBBINS, "The Work of the New York Settlement."

MR. HARRY LLOYD, "Trades Unions and Strikes."

*Before the Christian Union:*

MRS. BALLINGTON BOOTH, "The Aims and Work of the Salvation Army."

REV. MR. ROBERT ELLIOT SPEER, "A Study of the Character of Christ."  
(Eight Lectures.)

REV. DR. JOHN HALL, of New York, "Saving Faith," Hebrews X: 39.

REV. DR. GEORGE S. RAINSFORD, John V: 2-9.

MISS BIDDLE and MRS. BLAIR, "The Work of the Church Training and Deaconess' House, Philadelphia.

*Before the Temperance Association:*

MRS. BARNES and MISS CUMMINGS, "The Huguenot Seminary, Natal, South Africa."

*Before the Missionary Association :*

REV. MR. ROBERT ELLIOT SPEER, "Foreign Missions."

MR. LUTHER D. WISHARD, Foreign Secretary of the Young Men's Christian Association, "Christian Work of Men and Women in the Colleges of China, Japan and India."

MR. H. W. LUCE, Travelling Secretary of the Student Volunteer Movement, "The Formation and Work of the Student Volunteer Movement."

MISS E. P. COBB, "Christian Living, Especially in its Relation to Missionary Life."

DR. JESSICA R. CARLETON, of India, "Medical Missions in India, and the Need of College Women."

*Titles of Scientific Publications of the Faculty that have  
appeared in the past year.*

Dr. Charles M. Andrews,

"The Connecticut Intestacy Law," *Yale Review*, November, 1894.

Dr. George A. Barton,

1. "The Semitic Ishtar Cult," Part II. *Hebraica*, Vol. X.

2. Notes. *Hebraica*, Vol. X.

(a). "On the Semitic Ishtar Cult."

(b). "On the God Mut."

(c). "Was Ilu ever a Distinct Deity in Babylonia?"

3. "On the Interpretation of Shevet Sōpher in Judges V: 14." Read before the Society of Biblical Literature and Exegesis, December, 1894.

4. "A Plea for a Biblical Training." *Report of the Quinquennial Educational Conference of Friends*.

5. Review of Hilprecht's "Assyrica." *Classical Review*, May, 1895.

6. Several theological and religious articles in *The American Friend*.

Mr. Robert Gregg Bury,

1. "The Later Platonism." *Journal of Philology*, Vol. XXII.

2. "On Two Passages in Lucretius and Varro." *Classical Review*, March, 1895.

Dr. Hermann Collitz,

1. Articles on "Low German" and "Plattddeutsch." *Johnson's Cyclopædia*.

2. "Sammlung der Griechischen Dialekt-Inschriften," von H. Collitz und F. Bechtel, Band III., Heft iv., 2 Hälfte, Göttingen, 1895.

3. "The Etymology of ἄρα and of μάψ." *Proceedings of the American Philological Association*, 1894-95.

Dr. Alice Bertha Foster,

"A Few Figures on Occupation and Exercise." Read before the American Association for the Advancement of Physical Education, April, 1894.

Dr. Edward Washburn Hopkins,

1. "Religions of India." Published by Ginn & Co.
2. "Some Vedic Gods." *Oriental Journal*, December, 1894.
3. "Indra." *Oriental Journal*, March, 1895.
4. Review of Philipp's "Teaching of the Vedas." *The New World*, June, 1895.
5. Review of Holtzmann's "Mahābhārata," Part III. *Journal of Philology*, 1895.
6. Review of Deussen's "Geschichte der Philosophie." *Journal of Philology*, 1895.

Dr. Edward H. Keiser,

1. "On the Action of Magnesium upon the Vapors of the Alcohols, and a New Method of Preparing Allylene," by Dr. Edward H. Keiser and Mary B. Breed, A.B. *Chemical News*. Vol. LXXI.
2. Text-Book, "Laboratory Work in Chemistry, a Series of Experiments in General Inorganic Chemistry," 8vo., pp. viii., 119. Published by the American Book Company.
3. Review of Dr. Carl Arnold's "Repetitorium der Chemie." *Science*, May 10th, 1895.
4. Review of Sir Henry E. Roscoe's "John Dalton and the Rise of Modern Chemistry." *Science*, June 21st, 1895.
5. Review of Prof. Dr. Rudolf Arendt's "Bildungselemente und Erziehlicher Wert des Unterrichts in der Chemie." *Science*, August 9th, 1895.

Dr. Arthur Stanley Mackenzie,

- "On the Attractions of Crystalline and Isotropic Masses at Small Distances." *Physical Review*, March, 1895.

Dr. Dickinson Sergeant Miller,

- "Desire in Relation to Pleasure and Pain." Read before the American Psychological Association, December, 1894.

Dr. Thomas Hunt Morgan,

1. "Experimental Studies of the Blastula and Gastrula Stages of Echinus." *Archiv für Entwicklungsmechanik der Organismen*. II. Band, 2 Heft, 1895.
2. "The Fertilization of Non-nucleated Fragments of Echinoderm Eggs." II. Band, 2 Heft.



3. "Studies of the 'Partial' Larvæ of Sphaerechinus." II. Band, 1 Heft.

4. "The Formation of One Embryo from Two Blastulæ." II. Band, 1 Heft.

5. "Zur Analysis der ersten Entwicklungsstadien des Ctenophoreneies" (in collaboration with Hans Driesch). II. Band, 2 Heft.

6. "A Study of a Variation in Cleavage." II. Band, 1 Heft.

7. "A Study of Metamerism." (*The Quarterly Journal of Microscopical Science*, Vol. 37, 1895.)

Dr. Charlotte A. Scott,

"A Notice of Professor Cayley." *Bulletin of the American Mathematical Society*, Vol. I.

Dr. Herbert Weir Smyth,

"The Sounds and Inflections of the Greek Dialects." Vol. I. "Ionic." Oxford, at the Clarendon Press, 1894; pp. xxviii., 668.

President M. Carey Thomas,

"The Duties of the State and City to the Higher Education." Published as Number X. of the series of publications of the Civic Club of Philadelphia.

"The New Pedagogy." Published as Number XI. of the series of publications of the Civic Club of Philadelphia.

Memorial Address in honor of James E. Rhoads, LL.D. Published by Bryn Mawr College.

*Memorial Resolutions in honor of Dr. James E. Rhoads, President of Bryn Mawr College from 1885 to 1895.*

Minute adopted by the Trustees of Bryn Mawr College :

In the removal by death of our beloved friend and colleague, James E. Rhoads, President of this Board, and until recently, of the College, the trustees are conscious of a loss beyond their power to express in words.

The qualification of mind and character which called him to the head of the institution under our care have left their impress upon it, as they did upon all the varied forms of active benevolence with which he was connected.

The loss we mourn is but a part of that loss, so broadly felt in many ways, which has elicited a testimony, wide-spread and rarely equalled, to the value of his influence, both in its extent and its quality, with many tributes to those personal characteristics which, beautified by grace, have deeply endeared him and his memory to all who were privileged to associate with him.

But it was to the educational work over which he presided that he gave, in the maturity of his power, the fullest effort of an ever-earnest life. Appreciating the possibilities for elevating influences in the opening lives thus brought around him, he gladly gave of his best and richest, and, laboring with unsparing effort to promote the highest welfare of the institution, he showed in beautiful humility the possible results of energies consecrated to the highest ideals of life.

So it is especially fitting for his co-trustees to record their full appreciation of his invaluable part in the execution of the important trust committed to them ; and (assured as to *his* wish), they desire that the central thought of this expression should be a recognition of Divine grace, to which he ever ascribed the only qualifying power for truly effective service.

Therefore, with hearts tendered under a sense of our great loss, and of the added responsibility it brings, we would thus reverently record our sincere gratitude to the Almighty Disposer of events

that Bryn Mawr College should have had for its first President one whom the students could be confidently invited to regard as a type, in the fullest sense, of a true Christian gentleman, and a ripe scholar in that highest range of learning, the school of Christ. One whose sympathies, quickened by a consciousness of his own deepest needs, were ever ready with their rare union of strength and tenderness, whose fearless trust in the right and confidence in the essential harmony of all truth were of special value in wisely encouraging the researches of reverent scholarship. An unaffected courtesy, blended with an unconscious nobility of demeanor. He was free from self-assertion, though manifesting a holy boldness when he believed the truth required it.

But it was the crowning beauty of his life, that he filled with rare and rich meaning the idea of the Divine immanence, the indwelling of the life of Christ in the soul, which, as it is realised, becomes the fulfillment of the gospel purpose. It was his cordial response to the operation of this sanctifying truth that caused even his presence to be felt as an inspiration toward the pure and holy; and that clothed the silent language of his life with the baptising power of an unceasing prayer, that richest blessing of communion with Christ, which makes Him, though unseen, a beloved friend and an ever-present Heavenly Guide.

Resolutions passed by the Faculty of Bryn Mawr College :

*Whereas*, Death has called from us our friend and colleague, Dr. James E. Rhoads, the first President of the College; be it

*Resolved*, That we here record our affectionate admiration for his personal character, our grateful recognition of his unfailing courtesy and sympathy, our appreciation of his untiring efforts on behalf of the College, and our profound sense of loss in his removal from us;

*Resolved*, That we desire to express to Mrs. Rhoads, her son, and her daughters, our most sincere and reverent sympathy in their bereavement;

*Resolved*, That these resolutions be entered in the Faculty records, and that a copy be sent to the family of Dr. Rhoads and to the Board of Trustees.

Resolutions passed by the Alumnæ Association of Bryn Mawr College:

*Whereas*, We, the Alumnæ of Bryn Mawr College, have heard with the deepest sorrow of the death of Dr. Rhoads, the first President of the College;

*Resolved*, That we do hereby express our appreciation of his unceasing efforts to promote the highest interests of the College, our reverence for his noble Christian character, and our gratitude for the help that we, as students and Alumnæ, have received from his personal friendship;

*Resolved*, That we convey to those most closely related to him our heartfelt sympathy in their great sorrow.

ANNUAL REPORT  
OF  
THE PRESIDENT  
OF  
BRYN MAWR COLLEGE,  
1895-96.

---

PHILADELPHIA :  
ALFRED J. FERRIS, PRINTER, 29 NORTH SEVENTH STREET,  
1897.

## BOARD OF TRUSTEES.

PHILIP C. GARRETT,

*President.*

HENRY TATNALL,

*Treasurer.*

EDWARD BETTLE, JR.,

*Secretary.*

JAMES CAREY THOMAS, Baltimore.

JOHN B. GARRETT, Rosemont, Pa.

CHARLES HARTSHORNE, Philadelphia.

DAVID SCULL, Philadelphia.

ALBERT K. SMILEY, Lake Mohonk, N. Y.

PHILIP C. GARRETT, Philadelphia.

EDWARD BETTLE, JR., Philadelphia.

HOWARD COMFORT, Philadelphia.

JUSTUS C. STRAWBRIDGE, Philadelphia.

THOMAS SCATTERGOOD, Philadelphia.

HENRY TATNALL, Philadelphia.

JAMES WOOD, Mt. Kisco, New York.

ALEXANDER C. WOOD, Moorestown, New Jersey.

## EXECUTIVE COMMITTEE.

HOWARD COMFORT,

CHARLES HARTSHORNE,

JAMES CAREY THOMAS,

EDWARD BETTLE, JR.

## COMMITTEE ON BUILDINGS AND GROUNDS.

DAVID SCULL,

JUSTUS C. STRAWBRIDGE,

THOMAS SCATTERGOOD,

HENRY TATNALL.

## FINANCE COMMITTEE.

JOHN B. GARRETT,

THOMAS SCATTERGOOD,

JUSTUS C. STRAWBRIDGE.

## LIBRARY COMMITTEE.

EDWARD BETTLE, JR.,

HOWARD COMFORT,

DAVID SCULL.

## ACADEMIC APPOINTMENTS.

**M. CAREY THOMAS, PH.D.**, *President of the College and Professor of English.*

A.B., Cornell University, 1877; studied at the Johns Hopkins University, 1877-78; University of Leipsic, 1879-82; Ph.D., University of Zürich, 1882; Sorbonne, and Collège de France, 1883; Dean of the Faculty of Bryn Mawr College and Professor of English, 1885-94.

**CHARLOTTE ANGAS SCOTT, D.Sc.**, *Professor of Mathematics.*

Lincoln, England. Graduate in Honors, Girton College, University of Cambridge, England, 1880; B.Sc., University of London, 1882; Lecturer on Mathematics in Girton College, 1880-84; lectured in connection with Newnham College, University of Cambridge, England, 1880-83; D.Sc., University of London, 1885.

**EDWARD H. KEISER, PH.D.**, *Professor of Chemistry.*

S.B., Swarthmore College, 1880; Assistant in Chemistry, Swarthmore College, 1880-81; S.M., Swarthmore College, 1881; Fellow in Chemistry, Johns Hopkins University, 1882-84; Ph.D., Johns Hopkins University, 1884; Student at the Royal School of Mines, Freiberg, Saxony, 1884; Assistant in Chemistry, Johns Hopkins University, 1884-85.

**HERMANN COLLITZ, PH.D.**, *Associate Professor of Comparative Philology and German.*

Bleekede, Hanover, Germany. University of Göttingen, 1875-78; University of Berlin, 1878-81; Ph.D., University of Göttingen, 1878; Privatdocent in the University of Halle, 1885-86.

**JAMES HARKNESS, A.M.** (*Cambridge and London*), *Professor of Mathematics.*

Derby, England. Major Scholar, Trinity College, University of Cambridge, England, 1882; Graduate in Honors (8th Wrangler) in the Cambridge Mathematical Tripos, 1885; Mathematical Exhibitioner, London University Intermediate Arts Exhibition, 1885; Mathematical Scholar, London University B.A. Examination, 1887.

**HERBERT WEIR SMYTH, PH.D.**, *Professor of Greek.*

A.B., Swarthmore College, 1876, and Harvard University, 1878; University of Leipsic, 1879-81; University of Göttingen, 1881-83; Instructor in Classics and Sanskrit, Williams College, 1883-85; Ph.D., University of Göttingen, 1884; Fellow by Courtesy and Lecturer on Greek, Johns Hopkins University, 1885-87; Reader in Greek Literature, Johns Hopkins University, 1887-88.

**MARY GWINN, PH.D.**, *Associate Professor of English.*

Studied at the University of Leipsic, 1879-82; University of Zürich, 1882; Sorbonne, and Collège de France, 1883; Fellow in English, Bryn Mawr College, 1885-87, and Graduate Student, 1887-88; Ph.D., Bryn Mawr College, 1888.

**CHARLES MCLEAN ANDREWS, PH.D.**, *Associate Professor of History.*

A.B., Trinity College, 1884; Fellow in Johns Hopkins University, 1888-89; Ph.D., Johns Hopkins University, 1889.

**GONZALEZ LODGE, PH.D.**, *Professor of Latin.*

A.B., Johns Hopkins University, 1883; Graduate Scholar and Fellow, Johns Hopkins University, 1883-86; Ph.D., Johns Hopkins University, 1886; Professor of Greek, Davidson College, 1886-88; American School of Classical Studies, Athens, 1888-89; University of Bonn, 1889.

**GEORGE A. BARTON, PH.D.**, *Associate Professor of Biblical Literature and Semitic Languages.*

A.B., Haverford College, 1882, and A.M., 1885; A.M. Harvard University, 1890; Ph.D., Harvard University, 1891.

**JOSEPH AUGUSTE FONTAINE, PH.D.**, *Professor of Romance Languages.*

College of Sion, Nancy, France, 1879; Paris, 1880-81; Johns Hopkins University, 1882-86; Ph.D., Johns Hopkins University, 1886; Collège de France, Sorbonne, Ecole des Hautes Etudes, Ecole des Chartes, University of Bonn, 1886-87; Instructor, University of Nebraska, 1887-89; Professor of Modern Languages, University of Mississippi, 1889-91.

**ARTHUR STANLEY MACKENZIE, PH.D.**, *Associate Professor of Physics.*

A.B., Dalhousie University, 1885; Tutor in Mathematics, Dalhousie University, 1887-89; Fellow, Johns Hopkins University, 1890-91; Ph.D., Johns Hopkins University, 1894.

JAMES DOUGLAS BRUCE, PH.D., *Associate in English Philology.*

A.M., University of Virginia, 1883; University of Berlin, 1886-88; University of Strasburg, 1888; Johns Hopkins University, 1889-90; Professor of Modern Languages, Centre College, 1890-91; Ph.D., Johns Hopkins University, 1894.

THOMAS HUNT MORGAN, PH.D., *Professor of Biology.*

B.S., State College, Kentucky, 1887, and M.S., 1888; Graduate Scholar, Johns Hopkins University, 1888-89; Fellow in Biology, Johns Hopkins University, 1889-90; Ph.D., Johns Hopkins University, 1890; Adam T. Bruce Fellow, Johns Hopkins University, 1890-91.

JOSEPH W. WARREN, M.D., *Associate Professor of Physiology.*

A.B., Harvard College, 1871; University of Berlin, 1871-72; University of Leipsic, 1872-73; University of Bonn, 1873-79; M.D., University of Bonn, 1880; Assistant and Instructor in Physiology, Harvard Medical School, 1881-91; Lecturer in Medical Department of the University of the City of New York, 1885-86; Lecturer in Physiology, University of Michigan, 1889.

DICKINSON SERGEANT MILLER, PH.D., *Associate in Philosophy.*

University of Pennsylvania, 1885-88; Fellow in Philosophy, Clark University, 1889-90; Morgan Fellow, Harvard University, 1890-91; Walker Fellow, Harvard University, 1891-92; A.B. and A.M., Harvard University, 1892; University of Berlin, 1892-93; Ph.D., University of Halle, 1893.

ELMER P. KOHLER, PH.D., *Associate in Chemistry.*

A.B., Muhlenberg College, 1886, and A.M., 1889; Johns Hopkins University, 1889-91; Fellow in Chemistry, Johns Hopkins University, 1891-92; Ph.D., Johns Hopkins University, 1892.

EDGAR BUCKINGHAM, PH.D., *Associate in Physics and Physical Chemistry.*

A.B., Harvard University, 1887; Assistant in Physics, Harvard University, 1888-89; Assistant in Physics, University of Strasburg, 1889-90; University of Leipsic, 1890-91; Assistant in Physics, Harvard University, 1891-92; Tyndall Scholar of Harvard University, University of Leipsic, 1892-93; Ph.D., University of Leipsic, 1893.

LINDLEY MILLER KEASBEY, PH.D., R.P.D., *Associate Professor of Political Science.*

A.B., Harvard University, 1888; A.M., Columbia College, 1889; Ph.D., Columbia College, 1890; University of Berlin, 1890-91; University of Strasburg, 1891-92; *Rerum Politicarum Doctor*, University of Strasburg, 1892; Assistant in Economics, Columbia College, and Lecturer on Political Science, Barnard College, 1892; Professor of History, Economics and Political Science, State University of Colorado, 1892-94.

MORTIMER LAMSON EARLE, PH.D., *Associate Professor of Greek and Latin.*

A.B., Columbia College, 1886, A.M., 1887, and Ph.D., 1889; American School of Classical Studies, Athens, 1887-88; in charge of excavations at Sicyon, December, 1887, and July and August, 1891; Studied in Bonn, 1887-88; Studied in Berlin, 1889; Assistant in Greek, Columbia College, 1886-89; Acting Assistant in Latin, Columbia College, 1886-87; Instructor in Greek, Barnard College, 1889-95; Lecturer in Greek, Columbia College, 1894-95

PAUL ELMER MORE, A.M., *Associate in Sanskrit and Classical Literature.*

A.B., Washington University, 1887, and A.M., 1891; A.M., Harvard University, 1893; Assistant in Indo-Iranian Languages, Harvard University, 1894-95.

ALFRED HODDER, *Associate in English Literature.*

Graduate School, Harvard University, 1890-91; Morgan Fellow, Harvard University, 1891-92; University of Freiburg, University of Berlin, 1892-93.

MAX F. BLAU, PH.D., *Associate in German Literature.*

Goerlitz, Silesia, Germany. Ph.D., University of Leipsic, 1888; Teacher of German in the Berlitz School of Languages, Boston, 1891-92; Master of French and German in Thayer Academy, Braintree, Mass., 1892-96.

RICHARD NORTON, A.B., *Lecturer in the History of Art.*

A.B., Harvard University, 1892; American School of Classical Studies, Athens, 1892-94; University of Munich, 1894-95.

FLORENCE BASCOM, PH.D., *Lecturer in Geology.*

A.B., University of Wisconsin, 1882, B.Sc., 1884, and A.M., 1887; Johns Hopkins University, 1891-93; Ph.D., Johns Hopkins University, 1893; Assistant in Geology and Instructor in Petrography, Ohio State University, 1893-95.



OLIVER M. JOHNSTON, PH.D., *Lecturer in French Philology.*

A.B., Mississippi College, 1890, and A.M., 1892; Professor of English, Mississippi College, 1891-93; Fellow, Johns Hopkins University, 1895-96; Ph.D., Johns Hopkins University, 1896.

HERMAN T. LUKENS, PH.D., *Non-resident Lecturer in Education.*

A.B., University of Pennsylvania, 1885, and A.M., 1888; Universities of Halle, Jena, and Berlin, 1888-91; Ph.D., University of Jena, 1891; Teacher of Biology in Northwest Division High School, Chicago, 1891-94; Honorary Fellow in Psychology, Clark University, 1894-95; Docent in Pedagogy, Clark University, 1895.

LIGHTNER WITMER, PH.D., *Non-resident Lecturer in Experimental Psychology.*

A.B., University of Pennsylvania, 1888; Graduate Student, University of Pennsylvania, 1888-90; Assistant in Experimental Psychology, University of Pennsylvania, 1890-91; University of Leipsic, 1891-92; Ph.D., University of Leipsic, 1892; Assistant Professor of Experimental Psychology, University of Pennsylvania, 1892-97.

FREDERIC M. PAGE, PH.D., *Non-resident Lecturer in Italian and Spanish.*

Collège Chaptal, Paris; attended Studi Superiori, Florence; Instructor in Languages, University of Virginia, 1880-82; Acting Professor of Modern Languages and Literature, University of the South, 1882-83; Professor of Modern Languages and Literature, University of the South, 1883-91; Reader in Romance Languages, Bryn Mawr College, 1892-95; Ph.D., University of Heidelberg, 1895; Instructor in French, University of Pennsylvania, 1896-97.

ROSE CHAMBERLIN, *Reader in German and French.*

Great Yarmouth, England. Graduate in Honors, Newnham College, University of Cambridge, England, 1886 (Mediæval and Modern Languages Tripos, First Class).

ABBY KIRK, A.B., *Reader in English.*

A.B., Bryn Mawr College, 1892.

HARRIET RANDOLPH, PH.D., *Demonstrator in Biology and Reader in Botany.*

A.B., Bryn Mawr College, 1889; Fellow in Biology, Bryn Mawr College, 1889-90; University of Zürich, 1890-92; Ph.D., University of Zürich, 1892.

FLORENCE V. KEYS, A.B., *Reader in English.*

A.B., University of Toronto, 1891; Fellow in Greek, Bryn Mawr College, 1891-92; Fellow in English, Bryn Mawr College, 1892-93; Examiner in English in the University of Toronto, 1894-95.

LUCY MARTIN DONNELLY, A.B., *Reader in English.*

A.B., Bryn Mawr College, 1893; University of Oxford, England, and University of Leipsic, 1893-94; Sorbonne, and Collège de France, and University of Leipsic, 1894-95.

HELEN WHITALL THOMAS, A.B., *Reader in English.*

A.B., Bryn Mawr College, 1893; University of Leipsic, 1893-94, Second Semester; Sorbonne, and Collège de France, and University of Leipsic, 1894-95; Bryn Mawr College, 1895-96.

ALICE BERTHA FOSTER, M.D., *Director of the Gymnasium.*

Graduate of Dr. Sargent's Training School for Teachers, 1886; M.D., Medical School of University of Buffalo, 1891; Anderson Summer School, Chautauqua, 1892; Studied in Baron Posse's Normal Class in Practice, Boston, and in Harvard Summer School of Physical Education, 1886; Director Buffalo Sanatory Gymnasium of the Women's Educational and Industrial Union, Buffalo, 1886-92; Assistant Teacher, Harvard Summer School of Physical Education, 1889-90; Tutor in Physical Culture (in charge of the Women's Work), University of Chicago, 1892-94.

MARY SHERWOOD, M.D., *Lecturer on Hygiene and Physician of the College.*

A.B., Vassar College, 1883; M.D., University of Zürich, 1890; Lecturer on Pathology at the Woman's Medical College of Philadelphia, 1891-96.

HENRIETTA R. PALMER, A.B., *Librarian.*

School of Library Economy, Columbia College, 1887-89; Acting Librarian, Bryn Mawr College, 1890-91; A.B., Bryn Mawr College, 1893; Associate Librarian, Bryn Mawr College, 1893-95.

JANE BOWNE HAINES, A.M., *Associate Librarian.*

A.B., Bryn Mawr College, 1891, and A.M., 1892; Fellow in History, Bryn Mawr College, 1892-93.

MADeline VAUGHAN ABBOTT, A.B., *Secretary*.

A.B., Bryn Mawr College, 1892; Secretary to the Dean, Bryn Mawr College, 1893-94.

ISABEL MADDISON, B.Sc., *Secretary to the President and Reader in Mathematics*.

B.Sc., University of London, 1893; Graduate Student in Mathematics, Bryn Mawr College, 1892-93, and Fellow in Mathematics, 1893-94; Holder of the Mary E. Garrett European Fellowship and Student in Mathematics, University of Göttingen, 1894-95.

MARY HARRIS, A.B., *Recording Secretary*.

A.B., Bryn Mawr College, 1894.

FREDERICKA M. KERR, *Bursar*.

## ELEVENTH ANNUAL REPORT.

*To the Board of Trustees:*

The President of the College respectfully submits the following report for the eleventh academic year, extending from September 1st, 1895, to August 31st, 1896.

The irreparable loss sustained by your Board and by the whole of our college community in the death of the late James E. Rhoads, mentioned in my last report, has been followed during the past year by the death of two more of the original Trustees appointed by the Founder of the college. William Thurston of New York died on the 10th of October, 1895. He was a close friend of Dr. Taylor, and although on account of residence in another city and failing health he had almost from the first taken no part in the deliberations of the Trustees, his death cannot but be felt by those now connected with the college as a new break in the chain that links them to the friends and contemporaries of its Founder. James Whitall of Philadelphia died on the 28th of February, 1896, in the sixty-second year of his age. From the first inception of the college he had followed every detail of its organisation with the closest attention; from 1885 to 1892, and again from 1894 to the time of his death, he had served as a member of the Executive Committee; from the beginning he had been an active member of the Committee on Buildings and Grounds. His sound business judgment, his broad and liberal Christian faith, his loyal and generous belief in the wisdom of affording to women all possible opportunities, and above all his profound and intelligent interest in educational questions fitted him in a peculiar way for membership in a Board of Trustees engaged in outlining the policy of a new college for women. He was always ready to

advise and assist the administrative officers of the college, and was unsparing of his personal time and attention ; as one instance out of many it may be mentioned that in the elaboration of the system of book-keeping still in use in the college, which by rendering instantly accessible every item in a long and complicated series of accounts has done much to make it possible to keep the yearly expenditure of the college within its annual income, not only his own counsel, but the time and labor of his expert accountant were always at the service of the then Dean. For many years in ways known only to the president's office he contributed from his private means to the efficiency of the college. To his financial sagacity and broad views the college owes a debt that it is difficult adequately to express. In the sudden death by accident on January 6th, 1896, of Mr. John Stewardson, the college sustained another great loss. Since the first breaking of ground for Radnor Hall in May, 1886, Mr. John Stewardson and Mr. Walter Cope have served as architects of the college, and have erected successively Radnor Hall, Denbigh Hall, and Pembroke Hall, the last confessedly one of the most beautiful college buildings in America. To every detail of the internal and external decorations of these halls Mr. John Stewardson gave his minute personal attention, sometimes, as in the case of Pembroke, directing a whole wall to be torn out and himself showing the masons how to set the stones so as to produce the precise effect he had in mind. He was unfailingly cordial in his interest and fertile in advice and suggestion with regard to matters not immediately connected with the work that he had undertaken, and the beauty of our college grounds and buildings is in great part due to his artistic genius.

All the members of our present faculty will remain with us during the coming year. The creation by the Trustees of the two new departments of Geology and the History of Art has been amply justified by the interest aroused among the students and friends of the college ; special attention is here called to the work done by these departments as described in the last appendix to this report. The department of the history of art was opened under very favorable auspices. There was placed at our disposal for the purposes of illustration one of the largest and most valuable collections of Braun photographs in the United States, together with various smaller private collections ; and over two thousand dollars was given for the purchase of photographs and books on art and the necessary equipment. A well-lighted room on the third floor of Taylor Hall was furnished with cases and tables ; the walls of the hall outside this seminary room were lined with locked cases especially designed by Mr. Norton for the proper preservation and exhibition of the photograph collections ; and a very valuable reference card-catalogue of photographs was made by Mr. Norton for the use of the students. Although the courses in art, on account of schedule difficulties, were given at eight in the morning, they were elected by no fewer than seventy-five students. This fact, together with the satisfaction expressed by the parents and guardians of the students that the college should at last have offered instruction in art, leads me to believe that it will be wise for us to provide as ample facilities as possible for this department in the immediate future. An acquaintance with the art of antiquity and of the Renaissance besides being essential to a liberal culture is of very special importance to students of classical and modern literature and history.

The opening of the department of geology has brought us face to face with the serious question of obtaining space for the future growth of our scientific departments. During the preceding year the whole of Dalton Hall was already occupied, with the exception of two rooms on the fourth floor reserved for a future department of physiological psychology and a third room on the same floor already appropriated to a museum which had received several valuable donations, notably a very complete collection of stuffed birds of Pennsylvania, the gift of Mrs. John W. Townsend. In order to accommodate, in the most provisional fashion, the department of geology, all these three rooms were used. The museum was converted into a large beginners' laboratory and lecture-room, and the two rooms reserved for physiological psychology were so altered as to form an advanced laboratory and a professor's room. A glance at Dr. Bascom's report enumerating the large number of gifts of geological specimens she has secured during the year will show that the capacity of the fourth floor of Dalton Hall will soon be severely taxed by our geological department alone, and it is plain that we are in need of room for other scientific departments and for a suitable museum.

In accordance with the recommendations of the president's report of last year two temporary appointments have been made by the Trustees for the year 1896-97, pending the establishment of a chair of psychology and education. Through the courtesy of the Trustees of the University of Pennsylvania Dr. Lightner Witmer, Assistant Professor of Experimental Psychology in the University of Pennsylvania, was able to accept a non-resident lectureship in experimental psychology. Dr. Witmer, who received the degree of A.B. from the University of Pennsylvania, and the

degree of Ph.D. from the University of Leipsic, has been for six years associated with the department of psychology in the University of Pennsylvania, one year as assistant under Dr. James McKeen Cattell, now Professor of Experimental Psychology in the University of Columbia, and five years as the head of the department. Dr. Witmer will give, in connection with the first year of the group work in philosophy, a laboratory course of two hours weekly in experimental psychology, which will be open also as an elective to graduate and undergraduate students who are preparing themselves for the profession of teaching. Dr. Herman T. Lukens, who was known to intend residing in Philadelphia during the year 1896-97, has been appointed by the Trustees Non-resident Lecturer in Education for that year. Dr. Lukens has received the degrees of A.B. and A.M. from the University of Pennsylvania, and the degree of Ph.D. from the University of Jena. He has also studied at the universities of Halle and Berlin, and has been for the past two years successively Honorary Fellow in Psychology, and Docent in Pedagogy, in Clark University. He will conduct a pedagogical seminary for graduate students, and will lecture once weekly on pedagogy with special reference to methods of child-study, and once weekly on the history of education.

In view of the rapid growth during the past few years of our department of Teutonic languages the Trustees decided to complete its organisation by the appointment of an Associate in German Literature. Dr. Max F. Blau, whom they have appointed to this post for the year 1896-97, is of German birth and received the degree of Ph.D. from the University of Leipsic, where he was a favorite pupil of the late Professor Friedrich Zarncke, one of the

most eminent teachers of German literature in recent times. Dr. Blau has been in this country since 1891, and for the past four years has held the post of Master of French and German in Thayer Academy, Massachusetts, where he has won the reputation of a successful teacher of German, and has become thoroughly familiar with English.

The reorganisation of the courses in Italian, Spanish, and Romance philology referred to in my last report not having as yet been satisfactorily completed, two temporary appointments have been made by the Trustees for the year 1896-97. Dr. Oliver M. Johnston has been appointed Lecturer in French Philology for one year, and Dr. Frederic M. Page, who was for three years Reader in Italian and Spanish at Bryn Mawr College, has been appointed Non-resident Lecturer in Italian and Spanish, also for one year. Dr. Johnston received the degrees of A.B. and A.M. from Mississippi College, and the degree of Ph.D. from the Johns Hopkins University, and held for two years a professorship in Mississippi College. It is earnestly to be desired that the final organisation of the Romance department should be completed next year.

A complete list of the appointments and promotions in the faculty, as well as a list of the appointments of readers, demonstrators, and other officers will be found in the first appendix to this report.

In my last report I referred to the desirability of the endowment of more graduate fellowships, and graduate and undergraduate scholarships. It gives me great satisfaction to record in this report a very considerable and much needed increase in our facilities for helping graduate students to devote themselves to research, and for assisting



poor students to obtain an education. The Trustees have established two fellowships of the value of five hundred and twenty-five dollars each, one in philosophy and one in physics, and Miss Garrett of Baltimore has founded another European Fellowship of the value of five hundred dollars, named by her the President M. Carey Thomas Fellowship, to be awarded annually on the ground of excellence in scholarship to a student in her first year of graduate study at Bryn Mawr College, for the purpose of study and residence in the ensuing year at some foreign university, English or continental. These three fellowships were awarded for the first time at the Conferring of Degrees, June 4th, 1896.

The bond uniting the college with the public school system of Pennsylvania was strengthened by the cordial response of the Trustees to the request of the School Board of Education of Lower Merion Township that the new high school for boys and girls, opened a few miles from the college, at Ardmore, Pennsylvania, should receive some recognition and encouragement. A free scholarship of the value of one hundred dollars, entitling the holder to one year's free tuition in Bryn Mawr College, was created by the Trustees and placed at the disposal of the Board of Education ; and, largely in consequence of the establishment of this scholarship, the standard of the high school has been so raised as to enable graduates of the school to pass the entrance examinations of the college.

In February, 1896, the New Century Club of Philadelphia founded at Bryn Mawr College a scholarship of the value of one hundred dollars, to be known as The New Century Club Scholarship and to be awarded each year to a graduate of the Girls' High School of Philadelphia. The

gift of this scholarship was received with the liveliest satisfaction by the Trustees and the Faculty as a substantial proof of the sympathy and appreciation felt by the members of so influential and representative a club of Philadelphia women for the educational work of Bryn Mawr College.

A very important step, and one that will in all probability do much toward introducing the high standards of our entrance examinations into the secondary schools for girls in different parts of the United States, was taken by the Trustees in the foundation of six competitive entrance scholarships, three being of the value of \$300, and three of the value of \$200. These scholarships are to be awarded annually, on the basis of the sum total of marks obtained, to candidates presenting themselves in the matriculation examinations of Bryn Mawr College held each spring in different cities of the United States and in England. A first scholarship of the value of \$300 and a second of the value of \$200 are open to candidates from each of the following districts :—(a) The New England States ; (b) New York and New Jersey ; (c) Pennsylvania and all places not included in (a) and (b).

It may be interesting to note that in June, 1896, the three first scholarships were won by pupils of the Hill-house High School of New Haven, Connecticut, Dr. J. Sachs' School for Girls in New York City, and the Misses Shipley's School in Bryn Mawr, respectively.

In consequence of the passage by the Legislature of the State of Pennsylvania of a new law affecting all colleges and universities incorporated since 1873, it seemed best to the Trustees to secure a modification of the charter of the

college. The necessary steps were taken in the Court of Common Pleas of Montgomery County, Norristown, Pennsylvania, on April 6th, 1896, the application of the college being accompanied by a most cordial endorsement of its high standards of scholarship on the part of the newly-created College and University Council of the State, and by a full and satisfactory legal opinion of the Attorney General of the State of Pennsylvania to the effect that from its first incorporation the college had in fact possessed all the rights now ensured it.

During the year the Trustees formally approved the action of the President of the College in recognising the Academic Committee of the Alumnae Association as the official means of communication between the Alumnae Association and the authorities of the college; they also approved the proposal that the President should be authorised to invite two members of the faculty to be present and take part in one, or, should it prove desirable, both, of the two annual conferences. These conferences, which have been held since the year 1893, have proved of great service both in enabling the Alumnae Association as a whole to keep in touch with the college, and in affording the administration of the college an opportunity of consulting representative alumnae. The thanks of the college are due to the Alumnae Association for the pains they have taken to elect to this Committee members of the Association who are deeply interested in educational problems and competent to deal with them.

A very important work was undertaken and carried to a successful conclusion by the Graduate Club of Bryn Mawr

College during the past year. Since three European fellows of the college are sent abroad to study every year, and a considerable number of the graduates of the college are always to be found studying in foreign universities, it has become very important to our graduates to know the exact status of women in the various foreign universities, many of which seem to close or open their doors to women in accordance with the sympathies or antipathies of the successive rectors or ministers of education. To supply this information, the need of which was felt also by all other women of scholarly interests, there was undertaken by our Graduate Club the publication of a complete manual of the courses open to women in British, Canadian, and continental universities. The chief work, which included extensive correspondence with university authorities abroad, and accurate tabulation of the results obtained, was done by the President of the Graduate Club, Miss Isabel Maddison, assisted by a committee of the club. The book was published by the Macmillan Company and copyrighted in this country and abroad, the President of the College obtaining a gift to meet the expense of publication ; it was warmly praised by both American and English reviews and has proved of such service that a new edition is to appear each year. It may be noted as especially appropriate that this work of facilitating the advanced study of American women in foreign universities should be undertaken by the graduate students of a college which in accordance with the directions of its Founder has always in an especial manner devoted itself to the training by means of graduate study of "teachers of a high order."

It may be of interest to note here the increasing influence and usefulness of the Graduate Club, which consists of all the graduate students in any one year. To replace

the original club-room in Pembroke Hall a large and attractive suite on the first floor of Denbigh Hall was appropriated to the use of the graduate students, which during the last year has been completely refurnished by a friend of the college. Afternoon tea is served every afternoon by members of the club, and graduate students of different colleges have an opportunity to become acquainted. The public meetings of the club held monthly in the Pembroke drawing-rooms have been addressed by many well-known scholars and have aroused much interest.

The annual conferring of degrees took place on June 4th. A full list of the degrees conferred and of the fellowships and scholarships awarded for the year 1896-97 will be found in the second and third appendices to this report. Professor Charles Eliot Norton of Harvard University, delivered an address on "The Position and Ideals of Educated Women in America," and in the absence of the President of the College, Professor Herbert Weir Smyth, the senior Professor of Greek, conferred the degrees.

A full list of the speakers who have addressed the Graduate Club, the Philosophical Club, the De Rebus Club, the College Settlement Association, the Christian Union, the Temperance Association and the Missionary Association will be found in the fourth appendix.

The entire number of students enrolled during the year was 298. There were 52 graduate students, including fellows. The number of graduates was nearly 18 per cent. of the whole number of students. Of the undergraduates 241 were candidates for the degree and 5 were hearers. There were 263 students resident in the college halls and

35 non-resident. The 246 undergraduate students enrolled during the past year may be classified according to states and countries as follows :

Maine, 2; New Hampshire, 1; Massachusetts, 26; Rhode Island, 3; Connecticut, 10; New York, 41; New Jersey, 18; Delaware, 4; Pennsylvania, 82; Maryland, 14; District of Columbia, 2; Virginia, 2; Georgia, 1; Alabama, 1; Louisiana, 1; Kentucky, 5; Tennessee, 1; Ohio, 2; Indiana, 5; Illinois, 7; Iowa, 4; Arizona, 1; California, 2; Missouri, 2; Minnesota, 1; Arkansas, 1; Texas, 1; Nevada, 1; Oregon, 1; England, 1; France, 1; Japan, 2.

The fifty-two graduate students enrolled during the year may be classified as follows :

Maine, 1; Massachusetts, 3; Rhode Island, 1; New York, 3; New Jersey, 1; Pennsylvania, 11; Maryland, 4; West Virginia, 1; North Carolina, 3; Ohio, 3; Indiana, 2; Illinois, 2; Michigan, 1; Wisconsin, 2; Minnesota, 1; Iowa, 2; Missouri, 1; Kansas, 1; Canada, 3; Nova Scotia, 1; England, 3; Scotland, 1; France, 1.

The wide distribution of students in the above tables shows over how large an area the reputation of the work done at Bryn Mawr has extended itself. It is especially noteworthy that the fifty-two graduate students in residence during the past year represent eighteen states and five foreign countries.

The distribution of the students among the several departments was as follows:

Sanskrit and Comparative Philology, 3 ; Greek, 47 ; Latin, 90 ; English, 179 ; Anglo-Saxon, 17 ; German, 63 ; Gothic and Teutonic Philology, 11 ; French, 75 ; Old French, 5 ; Italian, 8 ; Semitic Languages and Biblical Literature, 9 ; History, 85 ; Political Science, 49 ; Philosophy,

67; History of Art, 75; Biblical Study, 53; Mathematics, 34; Physics, 16; Chemistry, 73; Geology, 9; Biology, 84.

In the material equipment of the college there have been gratifying improvements. In the past year the Trustees purchased, at a cost of \$18,071, an important piece of property comprising an acre and a half of land and a large stone mansion, with ample stable accommodations, by the acquisition of which the north front of the west wing of Pembroke Hall is protected for all time. This property was named Dolgelly, after a Welsh village belonging to the estate of Rowland Ellis, the original owner of the tract of land on which the college is now situated. The house was put in thorough repair, and partially furnished, at an expense of \$1,908, and will be occupied next year by some of the women instructors and officers of the college. It is probable that both Dolgelly and Cartref, which it adjoins, will be needed in the immediate future for the accommodation of students.

A new fireproof boiler-house to replace the one that had been burned in the summer of 1895 was completed in October last at a cost of \$4,449; and, in order to afford permanent accommodation for the workshops that had been temporarily installed over the former boiler-house, a much needed two story frame building was erected on the lower part of the college grounds at a cost of \$3,459. This building, which was erected by Messrs. Cope and Stewardson, contains a large carpenter's shop, an engineer's shop, a painter's shop, two sleeping rooms for employees, a carriage-house for the waggons, carts, lawn-mowers, etc., used in the service of the college, and two large storage-rooms, one on the ground floor and one in the attic, for keeping

under lock and key the supplies and materials used in work on the college buildings and grounds.

The constant attention of the Committee on Buildings and Grounds and of the President of the College was given to continuing the work, begun last year, of systematically renovating and repairing the college buildings and to making certain necessary improvements and alterations. The woodwork of Merion Hall and of the Gymnasium, both completed in 1885, was entirely repainted, inside and out. By carrying out a fortunate suggestion of the chief engineer the water supply in Merion Hall, in regard to which various eminent plumbers and engineers had been consulted without profit, was made as abundant as in the other halls of residence.

The basements of Merion Hall were converted into bicycle stables, accommodating eighty-seven bicycles, and have proved as convenient as if especially designed for the purpose. By the aid of various gifts, amounting in all to over \$1,900, placed in the President's hands to be used in that manner, the improvements begun last year in Dalton Hall were continued, and some new and absolutely necessary scientific apparatus was purchased. The fourth floor was fitted for the use of the department of geology as described on page 10; the engine moving the ventilating fans, which, in the first constructing of the hall, had been placed on the fifth floor, thus causing very decided vibration and greatly interfering with accurate scientific work, was removed to the basement, and a Cross engine added. By means of this change it became possible to place a steam-lathe in the instrument-maker's shop, and greatly to improve our electrical facilities. Fifteen additional microscopes were purchased for the use of the students of biol-



ogy, and over seven hundred dollars was expended for physical apparatus. All the original defects of Dalton Hall are now rectified, and it is well adapted to the purposes of the scientific departments; but more money is urgently needed for the equipment of our department of physics.

Work on the grounds was continued under the supervision of Mr. Olmsted. The former bed of Yarrow Street, which has now become part of the college property, was graded and brought into lawn, gifts of over eight hundred dollars having been obtained for this purpose. The Waring drainage system was very much extended during the summer, so as to make ample provision for Pembroke East.

The provisions against fire which were described so fully in the last President's report were continued throughout the year. Among these new provisions I regard as very important the building during the past year of a large underground storage-room for oil, paints, and other inflammable substances. Since each student is provided by the college with a student's lamp and the greater part of the grounds is lighted by oil lamps there is required a large quantity of oil, which until now has been kept in a frame shed, perilously near the barn and stables. At the cost of \$454, a large vaulted cave,  $8\frac{1}{4} \times 12\frac{1}{4} \times 28$  feet, was excavated in the side of a hill near the old spring-house; the sides and roof were lined with brick, and the entrance was provided with a double door opening on the Roberts Road. Apart from the greater safety thus secured, this storehouse, by enabling us to purchase oil in larger quantities, has made it possible to disregard the local dealers, and to obtain better oil at a lower cost.

The work of equipping the halls of residence with fire appliances was continued. Axes and additional buckets filled with water were placed in all the halls ; the supply of chemical fire-extinguishers was increased ; the hose connections were carefully tested and whenever necessary renewed. The wisdom of these precautions as well as the great value of the students' fire brigade, organised for the first time in the autumn of 1894, was proved when at three o'clock in the afternoon of March 23rd, 1896, Radnor Hall caught fire from a defective flue. The fire, which had broken out on two floors, was extinguished in a few minutes, thanks to the admirable promptness with which aid was called and given, and thanks in great part to the energy and judgment of Miss Mary Emma Guffey, captain of the students' fire brigade of Radnor Hall. In recognition of the services of the brigade the Trustees directed the President to have a medal struck in its honor, and placed in Radnor Hall. The damage done by the fire, it should be added, was very slight, and was entirely covered by the insurance. During the summer very considerable changes were made in the furnaces and flues of Radnor Hall so as to avoid all possibility of the recurrence of such an accident. It may be noted in this connection that Radnor and Taylor Halls are the only college buildings heated by furnaces.

The Committee on Buildings and Grounds and a special committee on Fire Protection, with Henry Tatnall as chairman, have, in conjunction with the President of the College, given much time and thought to working out the complicated details of an entirely new system of protection from fire, guaranteed by a ten years' contract with the Springfield Water Company, which has recently introduced water into the neighborhood of Brvn Mawr ; and also to

effecting very important alterations in our whole system of fire insurance. As the negotiations with the Springfield Water Company and with the fire insurance companies cannot be brought to a conclusion before the autumn of 1896, I will defer the full treatment of these matters until my report for next year.

It gives me great pleasure to record here that the long desired athletic field, mentioned as a far off possibility in my last report, has been subscribed for, and completed, within the past year. The location of this field first occurred to the President of the College in a conversation with the late Mr. John Stewardson who was delighted with the idea and took great interest in working out the levels. The first plans were made by Mr. Stewardson in conjunction with Mr. Samuel R. Garrigues, a local civil engineer. Mr. Olmsted as soon as he was consulted saw the possibilities of picturesque effect, and, after making certain minor alterations introduced the field, with its encircling road and bicycle track, into his general plans of the college grounds, recommending at the same time very urgently the construction of a carriage road connecting the college campus with this athletic field and with the lower part of the grounds. The road and bicycle track are not yet constructed. The field cost \$2,632.89, of which \$1,000 was appropriated by the Trustees from the surplus income of the college, and the remainder raised by the students and their friends. It is in the shape of an ellipse flattened on one side with a maximum length and width of 480 and 200 feet, and is so planned that a bicycle track encircling it would have four laps to the mile. It is practically level, having grades of only 12 inches to every 160 feet, yet is so

constructed as to dry rapidly after heavy rains. It is designed to serve also as a skating-pond in winter, and this part of the construction was attended with great difficulty. The stream that used to flow through the field is carried underground in a terra-cotta culvert except when it is used to flood the surface in which case the depth of the water in the field will vary from 6 inches in the upper part to 3 feet 6 inches at the lower. The whole surface of the field is underdrained with tile, and the banks of the lower portion are puddled with clay to serve as a dam. The expense entailed by the construction of the field for this double purpose was so great that we were not able to surround it with the bicycle track and carriage road included in Mr. Olmsted's original plan. It will cost between three and four thousand dollars to do this and to build the road planned by Mr. Olmsted connecting the field with the existing system of college roads. The present approach to the athletic field, which has added so much to the beauty and serviceableness of the college grounds, is by a footpath only.

Another important improvement made during the year was the erection at the entrance of the college grounds of a gateway designed by the architects of Pembroke Hall to accord with the general effect of the Pembroke tower and archway in front of which it stands. Two massive pillars of gray stone are surmounted by heraldic lions carved in stone, holding shields. An iron railing set in a gray stone coping connects these pillars with the archway and protects the grass on either side. This gateway, which forms a striking architectural feature of our college grounds, was the gift of Mr. Justus C. Strawbridge of the Board of Trustees.

The attention of the Trustees is especially called to the full information in regard to the working of the college during the past year given in the appendix to this report. The appendix contains the list of re-appointments and changes in the instructors and officers for the year 1896-97; a list of the fellowships and scholarships awarded for the year 1896-97; the names of candidates receiving degrees during the year; a list of the speakers who have addressed the college; the gifts made to the college during the year; the titles of the scientific publications of the faculty that have appeared in the past year; a tabular summary of the courses of instruction; a comparative statement of the distribution of students in the various departments of study during the past eleven years; and a brief description of the scholastic work of the past academic year, compiled from the reports prepared by the professors and instructors in the various departments.

M. CAREY THOMAS,

*October 9th, 1896.*

*President.*

## *Appendices.*

---

### *I.*

#### *Re-appointments and Changes in the Academic Staff and in the Officers of Administration for the Year 1896-97.*

JAMES HARKNESS, A.M., promoted to be Professor of Mathematics.

GEORGE A. BARTON, PH.D., promoted to be Associate Professor of Biblical Literature and Semitic Languages.

EDGAR BUCKINGHAM, PH.D., re-appointed Associate in Physics and appointed Associate in Physical Chemistry.

ALFRED HODDER, promoted to be Associate in English Literature.

MAX F. BLAU, PH.D., appointed Associate in German Literature.

RICHARD NORTON, A.B., re-appointed Lecturer in the History of Art.

FLORENCE BASCOM, PH.D., promoted to be Lecturer in Geology.

OLIVER M. JOHNSTON, PH.D., appointed Lecturer in French Philology.

HERMAN T. LUKENS, PH.D., appointed Non-resident Lecturer in Education.

LIGHTNER WITMER, PH.D., appointed Non-resident Lecturer in Experimental Psychology.

FREDERIC M. PAGE, PH.D., appointed Non-resident Lecturer in Italian and Spanish.

ROSE CHAMBERLIN, re-appointed Reader in German, and appointed Reader in French.

ABBY KIRK, A.B., re-appointed Reader in English.

HARRIET RANDOLPH, PH.D., re-appointed Demonstrator in Biology and Reader in Botany.

FLORENCE V. KEYS, A.B., re-appointed Reader in English.

THÉRÈSE F. COLIN, A.M., resigned the Readership in Romance Languages.

CHARLES BARNEAUD, PH.D., resigned the Readership in Italian.

LUCY MARTIN DONNELLY, A.B., appointed Reader in English.

HELEN WHITALL THOMAS, A.B., appointed Reader in English.

ALICE BERTHA FOSTER, M.D., re-appointed Director of the Gymnasium.

MARY SHERWOOD, M.D., re-appointed Non-resident Lecturer in Hygiene and Physician of the College.

ELIZABETH BATES, resigned the Assistantship in the Gymnasium.

HENRIETTA R. PALMER, A.B., re-appointed Librarian.

JANE BOWNE HAINES, A.M., re-appointed Associate Librarian.

MADELINE VAUGHAN ABBOTT, A.B., re-appointed Secretary.

ISABEL MADDISON, B.Sc., re-appointed Secretary to the President and appointed Reader in Mathematics.

MARY HARRIS, A.B., re-appointed Recording Secretary.

FREDERICKA M. KERR, re-appointed Bursar.

MRS. REGINALD CHASE, MISS SOPHIA KIRK and MISS IDA GARBER were re-appointed to the charge of Radnor Hall, Merion Hall, and Pembroke West respectively.

MRS. DERKHEIM-IRWIN resigned the charge of Denbigh Hall and MISS MIRAH M. LOGAN was appointed in her stead. MISS LAURETTE EUSTIS POTTS resigned the charge of Pembroke East and MISS MARTHA GIBBONS THOMAS, A.B., was appointed in her stead.

## II.

*Fellowships and Scholarships Conferred for the Year 1896-97.*

- VIRGINIA RAGSDALE, . . . . . *Bryn Mawr European Fellow.*  
Jamestown, N. C. S.B., Guilford College, 1892; A.B., Bryn Mawr College, 1896; Graduate Student in Mathematics, Bryn Mawr College, 1892-97.
- WINIFRED WARREN, . . . . . *Mary E. Garrett European Fellow.*  
Cambridge, Mass. A.B., Boston University, 1891, and A.M., 1894. Fellow in Latin, Bryn Mawr College, 1893-94, and Fellow by Courtesy, 1894-96; Student in Greek, University of Munich, 1896-97.
- CLARA LANGENBECK, . . . . . *President's European Fellow.*  
Cincinnati, O. Ph.G., Cincinnati College of Pharmacy, 1890; S.B., University of Cincinnati, 1895. Fellow in Biology, Bryn Mawr College, 1895-96; Student in Biology, University of Marburg, 1896-97.
- CAROLINE GARNAR BROMBACHER, . . . . . *Fellow in Greek.*  
Brooklyn, N. Y. A.B., Barnard College, 1895.
- MABEL WHITMAN BAKER, . . . . . *Fellow in Latin.*  
Washington, D. C. Columbian University, 1893-95; Teacher in Norwood Institute, Washington, 1895-96.
- MARY DELIA HOPKINS, . . . . . *Fellow in English.*  
Clinton, N. Y. A.B. and A.M., Bryn Mawr College, 1896.
- MINNIE ELIZABETH HIGHET, . . . . . *Fellow in German and Teutonic Philology.*  
Coburg, Canada. A.B., Victoria University, 1891, and A.M., 1892; Ph.M., Cornell University, 1894, and Ph.D., 1895.
- CHARLOTTE DE MACKLOT THOMPSON, . . . . . *Fellow in Romance Languages.*  
Baltimore, Md. A.B., Bryn Mawr College, 1896.
- ELLEN MAUD GRAHAM, . . . . . *Fellow in History.*  
Toronto, Canada. A.B., University of Toronto, 1896.
- GEORGIANA GODDARD KING, . . . . . *Fellow in Philosophy.*  
Norfolk, Va. A.B., Bryn Mawr College, and George W. Childs Prize Essayist, 1896.
- FANNY COOK GATES, . . . . . *Fellow in Mathematics.*  
Evanston, Ill. L.B., Northwestern University, 1894, and L.M., 1895. Fellow in Mathematics, Northwestern University, 1894-95; Graduate Scholar in Mathematics, Bryn Mawr College, 1895-96.
- FRANCES LOWATER, . . . . . *Fellow in Physics.*  
Nottingham, England. University College, Nottingham, 1888-91, 1892-93; Newnham College, University of Cambridge, England, 1891-92. Assistant Demonstrator in Physics, Bryn Mawr College, 1893-96.
- CHARLOTTE FAIRBANKS, . . . . . *Fellow in Chemistry.*  
St. Johnsbury, Vt. A.B., Smith College, 1894; Ph.D., Yale University, 1896. Graduate Student, Yale University, 1894-96.
- FLORENCE PEEBLES, . . . . . *Fellow in Biology.*  
Luthersville, Md. A.B., The Woman's College of Baltimore, 1895. Graduate Scholar in Biology, Bryn Mawr College, 1895-96.
- LULU GARLOW, . . . . . *Graduate Scholar in English.*  
Morgantown, W. Va. A.B., Beaver College, 1891; A.B., West Virginia University, 1893. Graduate Student in English and German, Bryn Mawr College, 1894-96.
- ELLEN ROSE GILES, . . . . . *Graduate Scholar in Semitic Languages.*  
Philadelphia, Pa. Wellesley College, 1892-93; A.B. and A.M., Bryn Mawr College, 1896.
- CARRIE ANNA HARPER, . . . . . *Graduate Scholar in English.*  
Charlestown, Mass. A.B., Radcliffe College, 1896.



- ANNA PEARL MACVAY, . . . . . *Graduate Scholar in Greek.*  
Athens, O. A.B., Ohio State University, 1892. Principal of High School, Ashtabula, O., 1892-95; Graduate Student in Greek, Latin, and English, Bryn Mawr College, 1895-96.
- ELLEN SETON OGDEN, . . . . . *Graduate Scholar in Teutonic Philology.*  
Troy, N. Y. L.B., University of Nashville, 1895. Teacher of Latin and Mathematics in the Winthrop Model School, Peabody Normal College, 1895-96.
- MARY HELEN RITCHIE, . . . . . *Graduate Scholar in Greek and Latin.*  
Falls of Schuylkill, Pa. A.B., Bryn Mawr College, 1896.
- ETHEL GRIMES, . . . . . *Earlham Graduate Scholar in English.*  
Toronto, Ind. A.B., Earlham College, 1896.
- CORNELIA ROBERSON, . *Guilford Graduate Scholar in Chemistry and Biology.*  
Guilford College, N. C. S.B., Guilford College, 1895.
- MARY HORTENSE BURNSIDE, . . . . . *Penn Graduate Scholar in English.*  
Oskaloosa, Ia. Ph., B., Penn College, 1896.
- LYDIA MITCHELL ALBERTSON, . . . . . *Foundation Scholar.*  
Philadelphia, Pa. Prepared by the Friends' Select School, Philadelphia. Foundation Scholar, Bryn Mawr College, 1893-96.
- SUSAN JANNEY DEWEES, . . . . . *Foundation Scholar.*  
Westtown, Pa. Prepared by the Westtown Boarding School.
- MARY ANNA MEREDITH, . . . . . *Foundation Scholar.*  
Lynnville, Ia. A.B., Penn College, 1896.
- REBA ALICE UNTHANK, . . . . . *Foundation Scholar.*  
Wilmington, O. A.B., Wilmington College, 1896.
- ALICE J. VAIL, . . . . . *Foundation Scholar.*  
Pasadena, Cal. Prepared by the Westtown Boarding School, Westtown, Pa. Foundation Scholar, Bryn Mawr College, 1894-96.
- FLORINA GERTRUDE WORTH, . . . . . *Foundation Scholar.*  
High Point, N. C. A.B., Guilford College, 1896.
- MABEL AUGUSTA CANADA, . . . . . *Bryn Mawr Matriculation Scholar.*  
New Haven, Conn. Prepared by the Hillhouse High School, New Haven. Holder of the First Bryn Mawr Matriculation Scholarship for the New England States, 1896-97.
- EDITH GOODELL, . . . . . *Bryn Mawr Matriculation Scholar.*  
Worcester, Mass. Prepared by Miss Florence Baldwin's School, Bryn Mawr, Pa. Holder of the Second Bryn Mawr Matriculation Scholarship for Philadelphia, 1896-97.
- CORNELIA VAN WYCK HALSEY, . . . . *Bryn Mawr Matriculation Scholar.*  
Rockaway, N. J. Prepared by Miss Dana's School, Morristown, N. J. Holder of the Second Bryn Mawr Matriculation Scholarship for New York and New Jersey, 1896-97.
- JOHANNA KROEBER, . . . . . *Bryn Mawr Matriculation Scholar.*  
New York City. Prepared by Dr. J. Sachs's School for Girls, New York City. Holder of the Bryn Mawr Matriculation Scholarship for New York and New Jersey, 1896-97.
- RENÉE MITCHELL, . . . . . *Bryn Mawr Matriculation Scholar.*  
Mount Carmel, Pa. Prepared by Private Study, by the Walton School, Philadelphia, and by the Misses Shipley's School, Bryn Mawr, Pa. Holder of the First Bryn Mawr Matriculation Scholarship for Philadelphia, 1896-97.
- JULIA STREETER, . . . . . *Bryn Mawr Matriculation Scholar.*  
Concord, N. H. Prepared by the Concord High School, by Mr. and Mrs. John McDuffie's School, Springfield, Mass., and by Miss Florence Baldwin's School, Bryn Mawr, Pa. Holder of the Second Bryn Mawr Matriculation Scholarship for the New England States, 1896-97.
- EVELYN HUNT, . . . . . *Anna Powers Memorial Scholar.*  
Philadelphia, Pa. Prepared by the Friends' Central School, Philadelphia. Holder of the Anna Powers Memorial Scholarship, 1895-96.

## III.

*Degrees Conferred During the Academic Year 1895-96.*

## DOCTOR OF PHILOSOPHY.

## HELEN BARTLETT, of Illinois.

Newnham College, University of Cambridge, England, 1889; Studied in Berlin, 1882, and 1890. A.B., Bryn Mawr College, 1892, and A.M., 1893; Graduate Student in English, Bryn Mawr College, 1892-93; Fellow in English, Bryn Mawr College, 1893-94; Holder of the American Fellowship of the Association of Collegiate Alumnae and Graduate Student in English and German, Bryn Mawr College, 1894-95. Subjects: English and Teutonic Philology. Thesis: The Metrical Division of the Paris Psalter.

## ANNIE CROSBY EMERY, of Maine.

A.B., Bryn Mawr College, 1892. Holder of the Bryn Mawr European Fellowship, and Graduate Student in Greek and Latin, Bryn Mawr College, 1892-93; Student in Greek and Latin, University of Leipsic, 1893-94; Secretary to the President, and Graduate Student in Greek and Latin, Bryn Mawr College, Second Semester 1894-95, and 1895-96. Subjects: Latin and Greek. Thesis: The Historical Present in Early Latin.

## ELEANOR LOUISA LORD, of Massachusetts.

A.B., Smith College, 1887, and A.M., 1890. Fellow in History, Bryn Mawr College, 1889-90, 1895-96; Instructor in History, Smith College, 1890-94; Holder of the European Fellowship of the Women's Educational Association of Boston, and Student in History, Newnham College, University of Cambridge, England, 1894-95. Subjects: History and Political Science. Thesis: The American Colonies as a Source of Naval Supplies for Great Britain.

## DOROTHY WILBERFORCE LYON, of New Jersey.

A.B., Wells College, 1887. Graduate Student in English, Bryn Mawr College, 1887-89, and First Semester, 1892-93, and Graduate Scholar in English, 1893-94; Head Teacher of English, and Teacher of History in the Randolph-Harrison School, Baltimore, Md., 1894-95; Graduate Scholar in Teutonic Philology, Bryn Mawr College, 1895-96. Subjects: English and Teutonic Philology. Thesis: The Latin Hymn, *Christe qui lux es et dies*, and its English and German Translations: a contribution to hymnology.

## ISABEL MADDISON, of England.

B.Sc., University of London, 1893. Graduate Student in Mathematics, Bryn Mawr College, 1892-93, and Fellow in Mathematics, 1893-94; Holder of the Mary E. Garrett European Fellowship and Student in Mathematics, University of Göttingen, 1894-95. Secretary to the President, Bryn Mawr College, 1895-6. Subjects: Mathematics and Physics. Thesis: On Singular Solutions of Differential Equations of the First Order in Two Variables, and the Geometrical Properties of Certain Invariants and Covariants of their Complete Primitives.

## MASTER OF ARTS.

## ELLEN ROSE GILES, of Pennsylvania.

Wellesley College, 1892-93; A.B., Bryn Mawr College, 1890. Chief Subject: Semitic Languages.

## MARY DELIA HOPKINS, of New York.

A.B., Bryn Mawr College, 1896. Chief Subject: English.

## CAROLINE WORMELEY LATIMER, of Maryland.

M.D., Woman's Medical College of Baltimore, 1890. Post-Graduate Medical Course, Johns Hopkins Hospital, 1890-91; Graduate Student in Physiology, Bryn Mawr College, 1891-96, and A.B., 1896. Chief Subject: Physiology.

## EMMA STANSBURY WINES, of Illinois.

Wellesley College, 1889-90; A.B., Bryn Mawr College, and George W. Childs Prize Essayist, 1894. Teacher of English and History in the Walton School, Philadelphia, 1894-95; Graduate Scholar in Philosophy, Bryn Mawr College, 1895-96. Chief Subject: English.

## BACHELOR OF ARTS.

## CAROLINE REEVES FOULKE, of Indiana.

Prepared by Miss Mary E. Stevens' School, Germantown, Philadelphia, and by Fräulein Reinbrecht, Berlin, Germany. Group: English and German. The work for this degree was completed in February, 1896.

**LILA VERPLANCK NORTH, of New York City.**

Wellesley College, 1881-82 ; University of Leipsic, 1895-96. Group : Greek and German. The work for this degree was completed in February, 1896.

**LUCY BAIRD, of Kentucky.**

Prepared by the Girls' High School, Louisville. Group : History and Political Science.

**ELIZABETH HEDGES BLAUVELT, of New Jersey.**

Prepared by Miss Mary E. Stevens' School, Germantown, Philadelphia. Group : Physics and Biology.

**LYDIA TRUMAN BORING, of Philadelphia.**

Prepared by the Friends' Central School, Philadelphia. Group : Latin and German.

**ELSA BOWMAN, of New York City.**

Prepared by the Brearley School, New York City. Group : Chemistry and Biology.

**HARRIET MATHER BROWNELL, of Connecticut.**

Prepared by the High School, Hartford, Conn. Group : Greek and Latin.

**HANNAH WARNER CADBURY, of Philadelphia.**

Prepared by the Friends' School, Germantown, Philadelphia. Group : History and Political Science.

**HELENA CHAPIN, of Pennsylvania.**

Prepared by Miss Florence Baldwin's School, Bryn Mawr, Pa. Group : History and Political Science.

**LISA BAKER CONVERSE, of Baltimore.**

Prepared by the Bryn Mawr School, Baltimore, Md., by Frau Dr. Meta Hempel, Berlin, Germany, and by private study. Group : Greek and Latin.

**KATHARINE INNES COOK, of Cambridge.**

Special Student at Harvard Annex, 1886-88, 1892-93. Group : Greek and Latin.

**MARY VIRGINIA CRAWFORD, of Bryn Mawr.**

Prepared by Mr. and Mrs. L. M. Johnson's School, Philadelphia, Pa., and by Miss Florence Baldwin's School, Bryn Mawr. Group : History and Political Science.

**ABIGAIL CAMP DIMON, of New York.**

Prepared by Mr. George C. Sawyer, Utica Academy, Utica, N. Y. Group : Chemistry and Biology.

**CLARA E. FARR, of New Jersey.**

Prepared by the Wellesley Preparatory School, Philadelphia, Pa. Group : Greek and French.

**RUTH WADSWORTH FURNESS, of Chicago.**

Prepared by Miss Rice's Collegiate School for Girls, Chicago. Group : Greek and Latin.

**ELLEN ROSE GILES, of Philadelphia.**

Wellesley College, 1892-93. Group : Greek and Semitic Languages.

**PAULINE DOROTHEA GOLDMARK, of New York City.**

Prepared by the Brackett School, New York City. Group : Chemistry and Biology.

**ANNA BRIGHT GREEN, of Pennsylvania.**

Prepared by the Reading High School, by Professor Laroche, and by private study. Group : German and French.

**BELLA MIRA GROSSMANN, of New York City.**

Prepared by the Brearley School, New York City. Group : German and French.

**HELEN EAYRE HAINES, of New Jersey.**

Prepared by Miss Randolph's School, Baltimore, Md., and by Miss Mary E. Stevens' School, Germantown, Philadelphia. Group : English and French.

**GERTRUDE LANGDEN HERITAGE, of Bryn Mawr.**

Prepared by Miss Florence Baldwin's School, Bryn Mawr, Pa. Group: Mathematics and Physics.

**MARY DAYTON HILL, of New Jersey.**

Prepared by Mrs. F. L. Nason and Miss Helen A. Merrill, New Brunswick. Group: Chemistry and Biology.

**MARY DELIA HOPKINS, of New York.**

Prepared by Fräulein Schmidt, Leipsic, Germany, and by Miss Mary E. Stevens' School, Germantown, Philadelphia. Group: English and German.

**MARY WARREN JEWETT, of New York.**

Prepared by the Granger Place School, Canandaigua, N. Y. Group: Greek and Latin.

**DORA KEEN, of Philadelphia.**

Prepared by Miss Case and Miss Hallowell's School, Philadelphia. Group: History and Political Science.

**GEORGIANA GODDARD KING, of Virginia.**

Prepared by the Leache-Wood School, Norfolk, and by private study. Group: Political Science and Philosophy.

**ELIZABETH BUTLER KIRKBRIDE, of Philadelphia.**

Prepared by Miss Case and Miss Hallowell's School, Philadelphia, and by Miss C. C. Guyer, Philadelphia. Group: History and Political Science.

**CAROLINE WORMELEY LATIMER, of Baltimore.**

M.D., Woman's Medical College of Baltimore, 1890. Post-Graduate Medical Course, Johns Hopkins Hospital, 1890-91; Graduate Student in Physiology, Bryn Mawr College, 1891-96. Group: Chemistry and Biology.

**EMMA HILLMAN LINBURG, of New Jersey.**

Prepared by Miss Martha Watson, Trenton, and by the State Model School, Trenton. Group: Latin and German.

**LILIAN M. MAPPIN, of Bryn Mawr.**

Prepared by Rev. W. F. Mappin and by private study. Group: Greek and Latin.

**REBECCA TAYLOR MATTSON, of Minnesota.**

Prepared by Miss Austin, Miss Knorr, and Miss Parigot, Philadelphia, Pa., and by private study. Group: English and German.

**MARY ANNA MENDINHALL, of Wilmington.**

Prepared by the Friends' School, Wilmington. Group: History and Political Science.

**TIRZAH LAMSON NICHOLS, of Philadelphia.**

Prepared by the Friends' Central School, Philadelphia, by Miss Florence Baldwin's School, Bryn Mawr, Pa., and by private study. Group: History and Political Science.

**VIRGINIA RAGSDALE, of North Carolina.**

S.B., Guilford College, 1892. Graduate Student in Mathematics, Bryn Mawr College, 1892-96. Group: Mathematics and Physics.

**MARY HELEN RITCHIE, of Philadelphia.**

Prepared by Miss Irwin's School, Philadelphia, Pa. Group: Greek and Latin.

**ANNA SCATTERGOOD, of Philadelphia.**

Prepared by Miss Case and Miss Hallowell's School, Philadelphia. Group: History and Political Science.

**CLARISSA WORCESTER SMITH, of Massachusetts.**

Prepared by Miss Heloise E. Hersey's School, Boston, Mass., and by Mr. John W. Dalzell's School for Boys, Worcester. Group: French, Italian and Spanish.

**CHARLOTTE DE MACKLOT THOMPSON, of Baltimore.**

Prepared by private study. Group: Greek and French.

**ADELINE B. WALTERS, of Pennsylvania.**

Prepared by the Friends' Central School, Philadelphia, Pa. Group: Greek and Latin.

## IV.

*Addresses Delivered in the Year 1895-96.**Before the Graduate Club :*

MRS. CORNELIUS STEVENSON, "The Influence of Archæology on Modern Thought."

PRESIDENT FRANCIS A. WALKER, "The Causes of Poverty."

MR. ROBERT ELLIS THOMPSON, "The Evolution of the Dwelling House."

PROFESSOR PAUL HAUPT, "The Genesis of the English Bible."

PROFESSOR WILLIAM W. GOODWIN, "The Rediscovery of Troy."

*Before the Philosophical Club :*

PROFESSOR WILLIAM JAMES, "Psychology and Relaxation."

REV. LANGDON C. STEWARDSON, "The Rights of Feeling."

MRS. HENRY WHITMAN, "Opportunity."

PROFESSOR LIGHTNER WITMER, "Measurement of Mental Time."

PRESIDENT ANDREWS, "The Metaphysics of Aristotle."

*Before the De Rebus Club :*

MR. WILLIAM DUDLEY FOULKE, "The Disadvantages of an Education."

REV. HENRY BAYARD HALE, "A Wider Meaning of the University Extension Idea."

*Before the College Settlement Association :*

MISS K. B. DAVIS, "The Practical Work of the Philadelphia Settlement."

MISS VIDA SCUDDER, "The Theory of Social Settlements."

*Before the Christian Union :*

REV. DR. MCCONNELL, "The Goodness Inherent in Life and the World."

REV. FATHER HUNTINGTON, "The Metaphysical Reasons for Christianity."

DR. LYMAN ABBOTT, "The Application of Religion to College Life."

DR. ALEXANDER MACKENZIE, "The Spirit of Generosity."

MISS SPENCER, "Foreign Missions."

*Before the Temperance Association :*

MRS. FANNY BARNES, "A College Girl's Social Influence."

*Before the Missionary Association :*

MRS. JENANYAN, "The Armenians."

## V.

*Gifts Received by the College during the Year 1895-96.*

The following gifts have been received during the past year, in addition to the gifts of special books to the library, which are enumerated and acknowledged in the report of the librarian. The sincere gratitude of the college is due to the liberal donors who have so greatly increased its facilities for usefulness.

Contributions to the Athletic Field as follows:

From the Treasurers of the Graduate Club and the Undergraduate Association, . . .	\$1031.15
From "A Friend," . . . . .	256.74
From Miss Garrett, . . . . .	345.00
From Surplus College Income, . . . . .	1000.00
	<hr/> \$2632.89

## Scholarships :

Bryn Mawr School Scholarships:	
From Treasurer of Bryn Mawr School, . . .	1600.00
Anna Powers Memorial Scholarship:	
From Miss Ethel Powers, . . . . .	200.00
Normal School Alumnae Scholarship:	
From Treasurer, Normal School Alumnae Association, . . . . .	100.00
Special Latin Graduate Scholarship:	
From "A Friend," . . . . .	100.00
Japanese Scholarship:	
From "A Friend," . . . . .	100.00
Palestine School Scholarship:	
From James Whitall, . . . . .	100.00
From Thomas Scattergood, . . . . .	10.00
	<hr/> \$2210.00

For the purchase of books for the Library:

From the Undergraduate Association, for the purchase of books on Art, as a Memorial of Dr. James E. Rhoads, . . . . .	\$ 289.14
From Miss Garrett, for Geology and Art, . . . . .	1226.97
From Mrs. Bertrand Russell, . . . . .	10.00
From "A Friend," for English, . . . . .	182.15
	<hr/> \$1708.26

Gifts of money, amounting in all to over four thousand six hundred dollars, were received from friends, who requested that their names should not be mentioned, for the special objects enumerated below:—

Graduate Room Furniture; Printing of Graduate Handbook; Grading of College Grounds; Equipment of Infirmary; Improvements on Dalton Hall; Purchase of Fifteen Microscopes; Physical Apparatus; Salary of Instrument Maker; Building of Oil House; Apparatus for Protection against Fire; Bicycle Stalls.

## VI.

*Titles of Scientific Publications of the Faculty that have appeared in the last year.*

Dr. Charles M. Andrews,

Articles on "The Manor (historical)," "The Mark System," "The Land System in the American Colonies," in *The Dictionary of Political Economy*, Vol. II.; London; Macmillan, 1896.

Dr. Charles A. Barneaud,

"Jefferson et l'Education en Virginie," "L'Education dans le Sud," and "L'Education en West Virginia," in the *Revue Internationale de l'Enseignement*, 1895.

"Le Nouveau Monde Educateur," "La dernière manière de Paul Bourget," and "L'Education Anglaise d'après un ouvrage récent," in *Revue du Monde Catholique*.

Dr. George A. Barton,

1. "The Relation of Gods and Men among the Early Semites," read before the Society of Biblical Literature, December, 1895.

2. A series of articles on the "Life and Letters of Paul," in *The American Friend*.

3. Three exegetical articles in *Faith and Works*, for July, August and September, 1896.

Dr. Florence Bascom,

"A Pre-Tertiary Nepheline-Bearing Rock." *The Journal of Geology*, February, March, 1896, Vol. IV., No. 2.

"A Geological Tour." *Baltimore American*, February 29th, 1896.

"Peridosteatite and Diabase." *Proceedings of the Academy of Natural Sciences*, Philadelphia, 1896.

"The Volcanic Rocks of South Mountain, Pennsylvania." *Bulletin of the United States Geological Survey*, No. 136, 1896; 124 pp., 28 pl.

A Review of Dr. Nordenskjöld's Bulletin, "Ueber Archaische Ergussgesteine aus Smaland." *The American Geologist*, March, 1896, Vol. XVII., No. 3.

Dr. Edgar Buckingham,

Review of the English translation of Nernst's "Theoretical



Chemistry" and "Note on the Theorem of Clausius." *Physical Review*, 1896.

Dr. Mortimer Lamson Earle,

1. Soph. *Trach.* 56 and Eurip. *Med.* 13. *Classical Review* IX., 8, November, 1895.

2. "Miscellanea Critica." *Classical Review* IX., 9, December, 1895.

3. "Miscellanea Critica," II. *Classical Review* X., 1, February, 1896.

4. Virgil, *Ecl.* I., 68-70. *Classical Review* X., 4, May, 1896.

5. "Some Remarks on the Moods of Will in Greek." *Transactions Am. Philol. Association*, Vol. XXVI., 1895: Proceedings of Special Session of 1894, p. 6 ff.

Dr. Lindley Miller Keasbey,

"The Nicaragua Canal and the Monroe Doctrine." *Annals of the American Academy of Political and Social Science*, January 1896.

Book on "The Nicaragua Canal and the Monroe Doctrine." In press, to appear September, 1896. G. P. Putnam's Sons.

Dr. Edward H. Keiser,

"The Preparation of Allylene and the Action of Magnesium upon Organic Compounds." *American Chemical Journal*, Vol. XVIII., No. 4, April, 1896.

Review of Remsen & Randall's "Chemical Experiments." *Science*, December 27th, 1895.

Review of Turpin's "Inorganic Chemistry" and Williams' "Chemical Experiments." *Science*, March 27th, 1896.

Dr. Arthur Stanley Mackenzie,

Review of Mach's "Popular Lectures." *Physical Review*, July, 1895.

Review of J. J. Thomson's "Elements of Electricity and Magnetism." *Bulletin of American Mathematical Society*, July, 1896.

Mr. Richard Norton,

"Introduction to a Catalogue of Casts of Greek and Roman Sculpture," in the Museum of Fine Arts, Portland, Oregon.

An article on the Greek vase painter Andokides, in the *Am. Journal of Arch.*, 1896, No. 1, p. 1 ff.

“Greek Grave Reliefs.” *Harvard Classical Studies*, October, 1896.

Dr. Charlotte Angas Scott,

“The Three Great Problems of Antiquity.” *Bulletin of the American Mathematical Society*, 1896.

“Note on the Equianharmonic Cubic.” *Messenger of Mathematics*, 1896.

Dr. Herbert Weir Smyth,

“Notes on the Anapaests of Aeschylus.” *Harvard Studies*, Lane Memorial Volume.

Dr. Joseph W. Warren,

“Our present knowledge of the interstitial secretion of the thyroid gland.” *Boston Medical and Surgical Journal*, CXXXV., 101.

## VII.

*Tabular Statement of the Courses of Instruction given in 1895-96.*

DEPARTMENT	COURSE	INSTRUCTOR	HOURS WEEKLY	NO. IN CLASS	
				1ST SEM.	2ND SEM.
SANSKRIT . . .	<i>Graduate Classes</i>				
	Sanskrit . . . . .	P. E. More	. 1 .	. 3 .	. 2 .
GREEK . . . .	Elementary Greek, Grammar, Xenophon's Anabasis, Books I.-IV., Homer's Iliad, Books I.-III. . . .	Dr. Earle	. 5 .	. 9 .	. 9 .
	Homer's Odyssey, Selections from Books I.-XII, minor . . . . .	P. E. More	. 2 .	. 12 .	. 12 .
	Lysias, minor . . . . .	Dr. Earle	. 2 .	. 11 .	. . . .
	Euripides, minor . . . . .	"	. 2 .	. . . .	. 11 .
	Greek Prose Composition, minor . . . . .	"	. 1 .	. 12 .	. 13 .
	Lectures on the History of Greek Literature, Epic and Lyric, major . . . . .	P. E. More	. 2 .	. 9 .	. . . .
	Lectures on History of Greek Literature, Drama and Prose, major . . . . .	"	. 2 .	. . . .	. 8 .
	Sophocles, major . . . . .	Dr. Earle	. 3 .	. 8 .	. . . .
	Thucydides, major . . . . .	"	. 3 .	. . . .	. 8 .
	Lyric Poets, post-major . . . . .	Dr. Smyth	. 2 .	. 4 .	. . . .
	Pindar, post-major . . . . .	"	. 2 .	. . . .	. 4 .
	Plato, post-major . . . . .	P. E. More	. 2 .	. 5 .	. 5 .
	New Testament Greek, . . . . .	Dr. Barton	. 1 .	. 2 .	. 3 .
	<i>Graduate Classes</i>				
	Lyric Poetry . . . . .	Dr. Smyth	. 4 .	. 4 .	. 2 .
LATIN . . . .	Horace, minor . . . . .	P. E. More	. 2 .	. 41 .	. 42 .
	Livy, minor . . . . .	Dr. Lodge	. 2 .	. 43 .	. . . .
	Livy and Cicero, minor . . . . .	"	. 2 .	. . . .	. 41 .
	Latin Prose Composition, minor . . . . .	"	. 1 .	. 42 .	. 43 .
	Lectures on the History of Latin Literature, major . . . . .	P. E. More	. 2 .	. 20 .	. 21 .
	Tacitus, major . . . . .	Dr. Lodge	. 3 .	. 28 .	. . . .
	Juvenal, Tibullus, Propertius, major . . . . .	"	. 3 .	. . . .	. 24 .
	Cicero, post-major . . . . .	Dr. Earle	. 2 .	. 9 .	. 6 .
	Martial, post-major . . . . .	"	. 1 .	. 7 .	. . . .
	Catullus, post-major . . . . .	"	. 1 .	. . . .	. 8 .
	<i>Graduate Classes</i>				
	Roman Drama . . . . .	Dr. Lodge	. 3 .	. 3 .	. 3 .
	Latin Syntax . . . . .	"	. 1 .	. 3 .	. 3 .
ENGLISH . . .	Lectures on the English Language and Lectures on the History of Anglo-Saxon Literature, required . . . . .	Dr. Thomas	. 3 .	. 131 .	. . . .
	Lectures on the History of English Literature to the time of Shakespeare, inclusive, required . . . . .	"	. 3 .	. . . .	. 131 .
	Essay Work, required, first year . . . . .	Dr. Gwinn & A. Kirk	. 2 .	. 69 .	. 67 .
	Essay Work, required, second year . . . . .	Dr. Gwinn & F. Keys	. 2 .	. 33 .	. 32 .
	Bright's Reader and Beowulf, minor . . . . .	Dr. Bruce	. 5 .	. 8 .	. . . .
	Beowulf, Morris and Skeat's Specimens of Early English, Part I. Chaucer . . . . .	"	. 5 .	. . . .	. 8 .
	English Critics of Life: Burke, Carlyle, Ruskin, major . . . . .	Dr. Gwinn	. 3 .	. 20 .	. 24 .

*Tabular Statement of the Courses of Instruction given in 1895-96,  
continued.*

DEPARTMENT	COURSE	INSTRUCTOR	HOURS WEEKLY	NO. IN CLASS	
				1ST SEM.	2ND SEM.
ENGLISH . . .	Eighteenth Century Poets, major . .	A. Hodder.	. 2 .	. 13 .	. 8 .
	<i>Graduate Classes</i>				
	English Drama . . . . .	"	. 3 .	. 6 .	. 5 .
	English Novelists of the Nineteenth Century . . . . .	"	. 1 .	. 5 .	. 4 .
	Anglo-Saxon, Beowulf . . . . .	Dr. Bruce	. 2 .	. 5 .	. 4 .
	Anglo-Saxon, Elene and Andreas . .	"	. 2 .	. 3 .	. . . .
	Anglo-Saxon, Cædmonian Poems . .	"	. 2 .	. . . .	. 3 .
	Middle English Romances . . . . .	"	. 2 .	. 3 .	. 2 .
GERMAN . . .	Elementary German, Grammar and Translation . . . . .	R. Chamberlin	. 5 .	. 4 .	. 5 .
	Lectures on the History of German Literature from Klopstock to the present time, minor . . . . .	Dr. Collitz	. 2 .	. 24 .	. 20 .
	German Reading, Wallenstein, minor . . . . .	R. Chamberlin	. 2 .	. 28 .	. . . .
	German Reading, Faust, P't I., minor	"	. 2 .	. . . .	. 26 .
	German Prose Composition, minor	"	. 1 .	. 25 .	. 16 .
	German Conversation, minor and major . . . . .	"	. 1 .	. 12 .	. 6 .
	Lectures on the History of Earlier German Literature, major . . . .	Dr. Collitz	. 2 .	. 11 .	. 11 .
	Selected Reading (Earlier German Literature), major . . . . .	"	. 1 .	. 9 .	. 9 .
	German Reading, Faust, Part II., major . . . . .	R. Chamberlin	. 1 .	. 8 .	. . . .
	German Reading, Goethe's Lyrics, major . . . . .	"	. 1 .	. . . .	. 6 .
	German Prose Composition, major	"	. 1 .	. 4 .	. 6 .
	<i>Graduate Classes</i>				
	Gothic . . . . .	Dr. Collitz	. 1 .	. 6 .	. . . .
	Gothic . . . . .	"	. 1 .	. . . .	. 7 .
TEUTONIC PHILOLOGY .	Middle High German . . . . .	R. Chamberlin	. 1 .	. 5 .	. 2 .
	Old High German . . . . .	Dr. Collitz	. 1 .	. 7 .	. 6 .
	Old Saxon . . . . .	"	. 1 .	. 5 .	. 4 .
	Introductory Teutonic Philology .	"	. 1 .	. 6 .	. 5 .
	Comparative Teutonic Philology .	"	. 1 .	. 3 .	. 3 .
	Teutonic Seminary . . . . .	"	. 1 .	. 4 .	. 5 .
FRENCH . . .	Elementary French, Grammar and Translation . . . . .	T. F. Colin	. 5 .	. 9 .	. 9 .
	Lectures on the History of French Literature of the Eighteenth and Nineteenth Centuries, minor . .	Dr. Fontaine	. 2 .	. 23 .	. 22 .
	French Critical Reading, minor	T. F. Colin	. 1 .	. 33 .	. 24 .
	French Prose Composition, minor .	"	. 1 .	. 18 .	. 17 .
	French Reading and Conversation, minor . . . . .	"	. 1 .	. 25 .	. 20 .
	Lectures on French Literature of the Sixteenth and the Seventeenth Centuries, major . . . . .	Dr. Fontaine	. 2 .	. 10 .	. . . .

*Tabular Statement of the Courses of Instruction given in 1895-96,  
continued.*

DEPARTMENT	COURSE	INSTRUCTOR	HOURS WEEKLY	NO. IN CLASS	
				1ST SEM.	2ND SEM.
FRENCH . . .	Lectures on Modern French Literature, major . . . . .	Dr. Fontaine	. 2 .	. . .	. 11 .
	French Critical Reading, major . .	"	. 1 .	. 5 .	. 7 .
	French Prose Composition, major .	"	. 1 .	. 6 .	. 10 .
	French Conversation, major . . .	"	. 1 .	. 7 .	. 9 .
	<i>Graduate Classes</i>				
	Old French Morphology and Phonetics . . . . .	"	. 1 .	. 4 .	. 3 .
	Old French Syntax . . . . .	"	. 1 .	. 1 .	. 1 .
	Epic Poetry . . . . .	"	. 1 .	. 5 .	. 3 .
ITALIAN . . .	Italian Grammar, Composition and Critical Reading, minor . . . . .	Dr. Barneaud	. 3 .	. 5 .	. 4 .
	Italian Literature, Grammar, Composition, and Critical Reading, major . . . . .	"	. 3 .	. 3 .	. 2 .
CELTIC AND SLAVONIC LANGUAGES SEMITIC LAN- GUAGES AND BIBLICAL LITERATURE	<i>Graduate Classes</i>				
	Old Irish Grammar . . . . .	Dr. Collitz	. 1 .	. 2 .	. 2 .
	<i>Graduate Classes</i>				
	Advanced Hebrew . . . . .	Dr. Barton	. 2 .	. 2 .	. 2 .
	Elementary Assyrian . . . . .	"	. 2 .	. 1 .	. 1 .
	Advanced Assyrian . . . . .	"	. 2 .	. 1 .	. 1 .
	Arabic . . . . .	"	. 2 .	. 1 .	. 1 .
	New Testament—Textual Criticism	"	. 1 .	. 1 .	. . . .
	History of the Progress and Development of Religious Ideas in the Bible . . . . .	"	. 2 .	. 1 .	. 1 .
	Historical Outlines of Christian Thought . . . . .	"	. 1 .	. 7 .	. 6 .
HISTORY . . .	History of Mediaeval Europe to the Period of the Renaissance . . . .	Dr. Andrews	. 5 .	70 .	. . . .
	History of Mediaeval Europe from the Period of the Renaissance to the close of the Religious Wars .	"	. 5 .	. . . .	. 72 .
	American Constitutional History, post-major . . . . .	"	. 2 .	. 11 .	. 10 .
	<i>Graduate Classes</i>				
	Historical Definition, Method, and Criticism . . . . .	"	. 2 .	. 2 .	. . . .
	History of the Community . . . .	"	. 1 .	. 8 .	. 8 .
POLITICAL SCIENCE . .	History of Political, Economic and Sociological Theories, minor and major . . . . .	Dr. Keasbey	. 5 .	. 34 .	. 37 .
	Social Evolution, post-major . . .	"	. 3 .	. 10 .	. 9 .
PHILOSOPHY .	Logic, Psychology, Ethics and History of Philosophy, required . .	Drs. Miller and Barton	. 4 .	. 54 .	. 57 .
	Lectures on the Origin and Contents of the Books of the Bible, required	Dr. Barton	. 1 .	. 51 .	. 51 .
	Problems in the Philosophy of Nature, minor . . . . .	Dr. Miller	. 2 .	. 4 .	. 2 .
	Continental Philosophy of the Seventeenth Century, minor . . .	"	. 3 .	. 7 .	. 5 .

*Tabular Statement of the Courses of Instruction given in 1895-96,  
continued.*

DEPARTMENT	COURSE	INSTRUCTOR	HOURS WEEKLY	NO. IN CLASS	
				1ST SEM	2ND SEM.
PHILOSOPHY	<i>Graduate Classes</i>				
	Transcendental Idealism . . . . .	Dr. Miller	1	1	1
ART AND	History of Greek Art . . . . .	R. Norton	2	19	20
ARCHÆOLOGY	History of Italian Art . . . . .	"	2	47	59
MATHEMATICS	Trigonometry, required . . . . .	J. Harkness	3	8	
	Solid Geometry, required . . . . .	Dr. Scott	2		10
	Analytical Conics, minor . . . . .	"	5	7	
	Algebra, Advanced Trigonometry, and Theory of Equations, and Ele- mentary Differential and Integral Calculus, minor . . . . .	J. Harkness	5		5
	Differential and Integral Calculus, Differential Equations, major . .	"	5	4	
	Curve Tracing, Analytical Geometry of Three Dimensions, major . .	Dr. Scott	4		4
	History of Mathematics, major . .	"	1		4
	Modern Pure Geometry, post-major	"	2	6	6
	Modern Higher Algebra, post-major	J. Harkness	2	2	1
	<i>Graduate Classes</i>				
	Higher Plane Curves, Theories of Transformation and Correspon- dence . . . . .	Dr. Scott	2	3	3
	Algebraic Functions, Elliptic and Abelian Integrals . . . . .	J. Harkness	2	2	2
PHYSICS . . . .	Laws and Properties of Matter and Heat, minor . . . . .	Dr. Mackenzie	5	7	
	Electricity and Magnetism, Light and Sound, minor . . . . .	Drs. Mackenzie and Buckingham	5		7
	Laboratory Work, minor . . . . .	"	4	6	7
	Theory of Electricity, Problems in Mechanics, major . . . . .	"	5	2	
	Theory of Heat, Theory of Light, Theory of Sound, major . . . . .	"	5		1
	Laboratory Work, major . . . . .	"	5	2	1
	Acoustics . . . . .	Dr. Buckingham	1	2	
	Physical Chemistry . . . . .	"	2	2	3
	<i>Graduate Classes</i>				
	Theory of Electricity and Magne- tism . . . . .	Dr. Mackenzie	3	2	2
	Seminary Work and Journal Club .	Drs. Mackenzie and Buckingham	1	2	2
CHEMISTRY . .	Introduction to General Chemistry (Lectures), minor . . . . .	Dr. Keiser	3	43	
	General Chemistry (Lectures), minor	"	3		40
	Reviews and Chemical Physics, minor . . . . .	Dr. Kohler	2	43	40
	Laboratory Work, minor . . . . .	Drs. Keiser and Kohler	5½	43	40
	Lectures on Organic Chemistry, major . . . . .	Dr. Keiser	2	24	21
	Lectures on Theoretical Chemistry, major . . . . .	Dr. Kohler	1	24	

*Tabular Statement of the Courses of Instruction given in 1895-96,  
continued.*

DEPARTMENT	COURSE	INSTRUCTOR	HOURS WEEKLY	NO. IN CLASS	
				1ST SEM.	2ND SEM.
CHEMISTRY . .	Lectures on Inorganic Chemistry, major . . . . .	Dr. Kohler	. 2 .	. 24 .	. . . . .
	Lectures on Inorganic Chemistry and Quantitative Analysis, major	"	. 3 .	. . . . .	. 21 .
	Laboratory Work, major . . . . .	Drs. Keiser and Kohler	. 5½ .	. 24 .	. 19 .
	Advanced Organic Chemistry, post-major and graduate . . . . .	Dr. Kohler	. 1 .	. 5 .	. 5 .
	Theoretical and Physical Chemistry, post-major and graduate . . . . .	Dr. Keiser	. 1 .	. 4 .	. 3 .
	Laboratory Work, post-major and graduate . . . . .	Drs. Keiser and Kohler	. . . . .	. 6 .	. 6 .
	Seminary Work and Journal Club .	"	. 2 .	. 6 .	. 6 .
	Lectures on Geology, post-major . .	Dr. Bascom	. 2 .	. 8 .	. 8 .
GEOLOGY . .	Laboratory Work, post-major . . .	"	. 2 .	. 8 .	. 7 .
	Field Work, post-major . . . . .	"	. 3-4 .	. 8 .	. 7 .
BIOLOGY . . .	Lectures on General Biology, minor	Drs. Morgan and Randolph	. 5 .	. 51 .	. . . . .
	Lectures on Plants, Vertebrates and Embryology, minor . . . . .	Drs. Morgan, Warren and Randolph	. 5 .	. . . . .	. 53 .
	Laboratory Work, minor . . . . .	Drs. Morgan and Randolph	. 5½ .	. 51 .	. 53 .
	Animal Physiology, major . . . . .	Dr. Warren	. 5 .	. 13 .	. . . . .
	Laboratory Work, major . . . . .	"	. 5½ .	. 13 .	. . . . .
	General Zoology, Theoretical Biology, major . . . . .	Drs. Morgan and Warren	. 5 .	. . . . .	. 15 .
	Laboratory Work, major . . . . .	"	. 5½ .	. . . . .	. 14 .
	Lectures on Embryology, post-major	Dr. Morgan	. 1 .	. 9 .	. 10 .
	Lectures on Central Nervous System, post-major . . . . .	Dr. Warren	. 1 .	. 11 .	. 12 .
	Laboratory Work, post-major . . .	"	. . . . .	. 11 .	. 12 .
	<i>Graduate Classes</i> . . . . .				
	Morphology . . . . .	Dr. Morgan	. 1 .	. 5 .	. 7 .
	Morphological Laboratory Work . .	"	. . . . .	. 6 .	. 6 .
	Physiology . . . . .	Dr. Warren	. 1 .	. 3 .	. 3 .
	Physiological Laboratory Work . .	"	. . . . .	. 1 .	. 1 .
	Journal Club . . . . .	Drs. Morgan, Warren and Randolph	1 hour f'tnightly	. 10 .	. 10 .
	Seminary Work . . . . .	"	1 hour f'tnightly	. 10 .	. 10 .

VIII.  
*Comparative Statement of the Distribution of Students in the various Departments of Study  
 during the eleven years from 1885 to 1896.*

	Sanskrit and Com- parative Philology.	Greek.	Latin.	English Literature.	Anglo-Saxon.	German.	Teutonic Philology.	French.	Romance Philology.	Italian.	Spanish.	Semitic Languages and Biblical Literature.	History.	Political Science.	Philosophy.	History of Art.	Mathematics.	Physics.	Chemistry.	Geology.	Biology.
1885-86,	.	30	18	32	.	7	.	10	1	2	.	.	8	.	.	.	32	.	10	.	10
1886-87,	1	20	24	39	.	17	1	3	2	.	2	.	15	.	19	.	29	.	6	.	22
1887-88,	1	28	36	39	3	42	4	25	2	2	4	.	.	13	45	.	12	11	16	.	25
1888-89.	2	40	35	67	7	50	4	26	.	.	1	.	63	17	16	.	23	10	10	.	27
1889-90,	6	46	58	76	9	44	4	21	.	1	1	.	34	24	20	.	28	7	11	.	26
1890-91,	1	42	59	86	6	46	3	23	.	4	1	.	54	30	16	.	35	6	24	.	26
1891-92,	2	36	75	92	8	46	1	28	1	5	1	.	46	40	28	12	24	7	31	.	42
1892-93,	4	38	45	135	10	60	2	30	1	8	4	4	57	54	28	19	27	27	45	.	42
1893-94,	4	44	80	156	15	71	3	50	1	10	5	7	53	70	52	.	32	20	45	.	47
1894-95,	5	51	91	170	10	75	6	83	5	8	9	12	86	53	57	.	34	20	71	.	53
1895-96,	3	47	90	179	17	63	11	75	5	8	.	9	85	49	67	75	34	16	73	9	84



## IX.

*Report for the academic year ending June 4th, 1896, compiled from the statements submitted to the President of the College by the instructors in the various departments.*

*Sanskrit and Comparative Philology.*

Mr. Paul Elmer More conducted a graduate class in Beginners' Sanskrit, one hour weekly throughout the year. Three students, all specialists in philology, attended during the first term, and two during the second. Selections from Lanman's Reader were studied in the transliterated text. The necessity of learning the difficult oriental alphabet was thus avoided, and it was possible to devote more time to the grammar and to reading.

*Greek.*

Dr. Herbert Weir Smyth conducted the graduate work in Greek. The class, to which no undergraduates were admitted, met four hours weekly throughout the entire year. The work of the year centered on the melic poets contained in the third volume of Bergk's *Poetae Lyrici Graeci*. All the remnants collected in this volume were read by the members of the class. Lectures were given by the instructor on the Greek folk song, on the history of the various departments of Greek lyric, on the dialects, and especially the lyric metres. A critical history was given of the chief early lyricists. A large part of the course was devoted to an analysis of the structure and genesis of the various forms of metre employed in the lyric poetry of the Greeks. In preparation for the study of Alcaeus and Sappho, the class also read the inscriptional remains of the Aeolic dialects. Papers were prepared by members of the class on the following subjects: the fragment of the *Parthenion* of Alcman; a criticism of Simonides' encomium preserved in the *Protagoras*; the genuineness of the dithyramb preserved under the name of Arion; a discussion of Ibycus, fragment 1.

The post-major, major, and minor undergraduate courses were given by Dr. H. W. Smyth, Dr. M. L. Earle, and

Mr. P. E. More, as laid down in the program. Dr. Smyth read with the post-major class selections from the Lyric Poets during the first semester, and most of the *Olympians* and *Pythians* of Pindar during the second semester. The class met two hours weekly. Attention was devoted to rapid reading in the first mentioned course; while emphasis was laid upon the scansion in Pindar. Mr. More conducted a post-major course in Plato, two hours weekly throughout the year. A large part of Plato's *Republic* was read. Besides a careful study of the text some attempt was made to treat the philosophy of the work. Dr. Earle met the major class in Greek three hours weekly. The first semester was devoted to the careful reading of Sophocles' *Oedipus Rex*. Some attention was also given to the versification and to the stage presentation of Greek plays. During the second semester the seventh book of Thucydides was read entire, and selections from the sixth book. Mr. More met the same class, two hours weekly, in Greek Literature. No text-book was used, but an attempt was made to present the chief authors in lectures, treating them from a biographical and literary standpoint. Considerable attention was paid to the history of the various periods treated. It seemed better in the limited time to study the few great writers fully rather than to confuse the young student with a host of meaningless names. In connection with the lectures, the class read selections from the various works in the original, and was held responsible for this reading in the examinations. In Greek the time was devoted chiefly to Homer, the chief lyric poets, the dramatists, and Plato. An attempt was made to complement the work in the parallel classical courses, and not to duplicate it. Dr. Earle met the minor class in Greek, three hours weekly throughout the year. Two hours weekly were devoted during the first semester to the reading of a selection from the orations of Lysias and one hour weekly to turning into Greek prose in the style of Lysias English sentences set by the instructor: in the second semester two hours weekly were given to the reading of Euripides (the *Alcestis* entire and half of the *Medea*), and one hour to putting into Attic Greek prose an English outline of the *Alcestis*. A few hours in each semester were

specially devoted to a review of Greek syntax. The same class read Homer, two hours weekly throughout the year, with Mr. More. The first eleven books of the *Odyssey* were read almost entire.

The Beginners' Course in Greek was conducted by Dr. Earle. The greater part (some one hundred and twenty lessons) of White's *Beginners' Greek Book* was studied during the year, with careful attention to a good grounding in forms and to the systematic acquisition of a vocabulary. The greater part of this work was done during the first semester, the second semester being devoted chiefly to the reading of Xenophon and Homer. Four books of the *Anabasis* were read, and three books of the *Iliad*.

### *Latin.*

Dr. Gonzalez Lodge conducted, four hours weekly throughout the year, the graduate work in Latin, to which no undergraduates were admitted.

The Latin Seminary was organised as in former years, but instead of the course in Latin Epistolography, previously announced, it was thought better to repeat the course of the previous year in Roman Drama, inasmuch as the class was composed of students who had not been in the seminary the previous year.

Lectures on the development of the drama among the Romans supplemented the seminary work proper, which was devoted especially to the interpretation of selected passages of the *Miles Gloriosus* of Plautus. The students took part in the interpretation in order; and in addition spent some time in the study of special topics under the guidance of the instructor. One student carried to successful completion a study of the use of the Historical Present in Early Latin, and submitted it to the faculty as a dissertation in part fulfilment of the requirements for the degree of doctor of philosophy. She subsequently fulfilled the other requirements for this degree which was conferred upon her in June, 1896.

The post-major course which was announced in the program as five hours was reduced to three for the first time since the

complete organisation of the department on account of Dr. Lodge's inability through recent illness to offer his usual two-hour course in Plautus and Terence. Dr. Earle offered two post-major courses, one of one hour, the other of two hours weekly throughout the year. Selections from the Epigrams of Martial and from Catullus were read. The class showed particular interest in Catullus. In the one-hour course the first semester was devoted to the first book of Cicero's *De Oratore*; the second semester, to the second book of the same work. In connection with the reading of the second semester exercises were given in alternate weeks in advanced Latin composition, consisting of writing of abstracts and translation. The class made such marked progress in composition, as to convince the instructor that there is a real need of more extended instruction in Latin composition to meet the wants of serious students.

Dr. Lodge met the major class, three hours weekly throughout the year. Tacitus' *Annals* (the reign of Tiberius) were read during the first semester; and selections from Horace's *Satires*, Juvenal, Tibullus, and Propertius during the second semester. Selected letters of Cicero and Pliny were assigned as private reading for the class. Mr. More conducted the class in Latin Literature, two hours weekly throughout the year, on the same principle as the class in Greek Literature; but more attention was paid to the history of the various periods, because of the intimate association between the life of the Republic and the aims of its great writers. Latin literature was treated from its beginning to the time of Lucan, the prose writers, however, being of necessity discussed briefly. Lucretius, Catullus, Cicero, and Vergil received most attention.

The minor course was given as announced in the program. Livy's account of Hannibal's march into Italy, and his Italian campaign down to and including the battle of Cannae, and also Cicero's *Second Philippic* were read with Dr. Lodge, two hours weekly throughout the year; and selections from Horace's *Odes* and *Epistles* were read with Mr. More, two hours weekly throughout the year. Dr. Lodge also met the class in prose composition, one hour weekly throughout the year. Vergil's *Æneid*, Books vii.-x., were assigned as private reading.

A large number of students elected Latin. The major class of this past year was the largest major class in any subject in which instruction is offered in the college; and it is manifest that the department of Latin should be strengthened as soon as possible by the appointment of another specialist in Latin who will co-operate with Dr. Lodge, and devote his time wholly to Latin.

### *English.*

The graduate work in English was conducted by Dr. Mary Gwinn, Dr. James Douglas Bruce, and Mr. Alfred Hodder, as laid down in the program.

The course offered by Dr. Gwinn in Seventeenth Century Prose Writers was not elected, graduate students preferring to work in the course on English Critics of Life: Burke, Carlyle, and Ruskin, given by Dr. Gwinn in the major year of the English Group.

Mr. Hodder met a graduate class in the Early English Drama, two hours weekly throughout the year. The first semester was devoted to the predecessors of Shakespeare, beginning with the Miracle plays, and the second semester to Shakespeare's successors from Jonson to Shirley. Mr. Hodder conducted also a graduate course in the modern movement in English fiction as illustrated by Eliot, Browning, and Meredith, one hour weekly throughout the year.

Dr. Bruce conducted a graduate course in Middle English Romances, two hours weekly throughout the year. During the first semester the English Arthurian Romances were read and reported on by members of the class. A course of lectures dealing fully with recent investigations of the origin and development of the Arthurian legend accompanied the reading of the romances. During the second semester the study of the class was directed to the chief Middle English Romances not embraced in the Arthurian cycle, such as *William of Palerne*, *Floris and Blancheflur*, and others. As in the first semester, reports were required on the chief literature relating to the romances. Dr. Bruce also conducted a graduate course in *Beowulf*, two hours weekly throughout the year. The elements of myth

and saga contained in the poem were discussed in a series of lectures, and especial attention was paid to the history of the construction of the text, which was studied according to the seminary method. Lectures on the theories concerning the composition of *Beowulf* and the scansion of alliterative verse were also given. Dr. Bruce met a class of graduate students, two hours weekly throughout the year, for practice in translation. *Andreas*, *Elene*, and more than half of *Genesis* were read in this way. Reports were made by the students on the more important articles and dissertations that relate to these texts.

Dr. Gwinn met a class of graduates and undergraduates, three hours weekly throughout the year, in the major year of the English group. The subject was English Critics of Life in the Nineteenth Century; the authors chosen were Burke, Carlyle, and Ruskin. The greater part of Burke's writings, with the exception of those on the affairs of India, most of Carlyle's writings, with the exception of his histories and miscellanies, and most of Mr. Ruskin's writings since 1860 were studied by the class.

Mr. Hodder met the major class, two hours weekly, in Poets of the Eighteenth Century, from Waller to Cowper. The first two-thirds of the year was spent on the movement in English poetry that culminated in Pope, and the last third on the beginning of the reaction against the critical school, from Ramsay's *Gentle Shepherdess* and Thomson's *Seasons*, onward.

Dr. Bruce met the minor class of the English group, five hours weekly throughout the year. Bright's *Outlines of Anglo-Saxon Grammar* and a majority of the selections in the accompanying *Reader* were studied during the first semester, and also about one-third of *Beowulf*. During the latter part of the semester the class was practised in the scansion of the alliterative verse according to Sievers' system as expounded in lectures accompanying the reading. In connection with *Beowulf* lectures were given on the elements of myth, saga, and history contained in the poem and on questions of Teutonic antiquities in general suggested by the text. In the second semester *Beowulf* was completed, portions of Morris' *Specimens of Early English* were read, and the closing six weeks were devoted to

Chaucer. Lectures on the life, language, and versification of Chaucer were given, and practical exercises in the subjects of language and versification accompanied the reading of select texts in the class-room.

A class of one hundred and thirty-eight students attended, three hours weekly throughout the year, President Thomas' lectures on English literature, covering the period from the first beginning of English literature to the time of Spenser.

The essay work of the first and second year, in connection with the lectures on English literature, equivalent to two hours weekly, was conducted as usual by Dr. Gwinn, assisted by Miss Kirk and Miss Thomas in the first year, and by Miss Keys and Miss Donnelly in the second year. In the first semester of the first year's work seventy students were registered, sixty-seven of whom did full work. Two rhetoric papers (abstracts of Wendell's *English Composition* and Genung's *Practical Rhetoric*) were written, and one essay. In the second semester sixty-eight students were registered, sixty-seven of whom completed the course. During the first eight weeks a study was made of the construction of the essay, *Essays in Criticism* being used as the basis of the work. Four papers were written and weekly meetings of the class were held. In the last half of the semester a second essay was written. The essay correctors met each member of the class twice during the year for private work, besides being "at home" to the class for general consultation, three hours of each week.

The second year's work was similarly conducted, the essay correctors meeting the members of the class, both individually and together, for conference and advice. Each student in the course wrote four carefully prepared essays.

The George W. Childs essay prize for the year was awarded by the English Department to Miss Georgiana Goddard King, of Norfolk, Virginia.

### *Teutonic Philology.*

The demand for graduate courses in Teutonic philology and German has been so great during the past year that the department has experienced some difficulty in satisfying the wishes of

single students. The difficulty was caused, not so much by the number of graduates, although the number has been larger than in previous years, as by the fact that arrangements had to be made for students whose previous training and whose aims varied widely. While some of the students were just entering upon advanced work, others had spent one or two, or more, years in graduate study, either in Bryn Mawr or in other institutions. On the other hand, some were pursuing a regularly graded three year's course in Teutonic philology, and others had arranged to spend only one year at Bryn Mawr, and endeavored to follow in this one year as many different classes as possible. The department yielded as much as possible to the individual wishes of the students by giving with but one exception all the courses announced for a three years' term in Teutonic philology. This, however, was possible only by reducing the time for each class to one hour weekly, and by limiting some of the courses to a rather cursory treatment of the subject. After having tried this plan for two years, it has been demonstrated that such a variety of courses is undesirable within one and the same semester, and should be avoided for the future. In many cases matters may be improved by simply substituting two semi-annual courses of two hours for two annual courses of one hour. In addition, it may be well to emphasise the fact that in our program a term of three years has been set aside for the study of Teutonic philology. Students having only one year at their disposal should be advised to follow only the courses intended for first year graduate students.

The following courses were given:

Gothic. The course was conducted on the same plan as in previous years, in that it was not restricted to a practical study of the Gothic language but also served to acquaint the students with the elements of comparative Aryan grammar. Wright's *Gothic Primer* was used as a text-book.

Old High German. After some introductory lectures the elements of Old High German grammar were studied in Braune's *Abriss der Althochdeutschen Grammatik*. Due attention was paid to the relation of Old High German to Gothic, and to the later stages of High German, i.e., Middle High German and



Modern German. The study of Old High German grammar was followed by the reading of Old High German texts, selected from Braune's *Althochdeutsches Lesebuch*.

Middle High German. This course was almost entirely devoted to reading parts of the *Nibelungenlied*. There were also lectures on the history of the manuscripts, etc.

Old Saxon. In a series of introductory lectures the sources of our knowledge of Old Saxon were reviewed, and literary and philological questions discussed concerning the *Heliand* and the recently found fragments of the Old Saxon *Genesis*. For the study of Old Saxon grammar Gallée's *Altsächsische Grammatik* was used. A few hours remained at the end of the course for reading and analysing selections from Sievers' edition of the *Heliand*.

Introduction to the Study of Teutonic Philology. These lectures for beginners in Teutonic philology were intended to acquaint students with the literary sources of the different Teutonic and the cognate Aryan languages; they also discussed some of the more general questions connected with the study of comparative grammar, and included an outline of general phonetics.

Comparative Teutonic Grammar. This course of lectures was given to a few advanced students who were familiar with most of the Teutonic languages, and with Latin, Greek, and Sanskrit. The course was restricted to the treatment of Teutonic declension, Teutonic conjugation having been studied in the preceding year. The close relationship of the Teutonic inflectional classes and inflectional endings to those found in Sanskrit, Greek, and Latin was pointed out, and the development of the Teutonic forms was traced from Primitive Aryan to Primitive Teutonic, and to the single Teutonic languages. The literature on the subjects touched in the course was quoted in full; new theories were proposed in many instances, and problems pointed out which it would be desirable to investigate anew.

The above courses were given by Dr. Hermann Collitz, with the exception of Middle High German, which was given by Miss Rose Chamberlin. All the classes met once a week.

Teutonic Seminary, under the direction of Dr. Collitz. Most of the seminary work consisted of the critical interpretation of selections from Wolfram's *Parzival*, one hour weekly, by members of the seminary. These selections included some of the most difficult passages in Middle High German, viz., the introduction of Wolfram's poem (book I., verses 1-116), and part of the account of Parzival's visit to the Holy Grail (book V., verses 1-444). The following papers were prepared by members of the seminary: the fellow in Teutonic philology, Miss M. Steele Smith, made a study of the development of the diphthong *iu* in Teutonic, with special reference to the various forms of this diphthong in Old Saxon. Her paper was intended to be handed in as a thesis for the degree of Ph.D., but unfortunately she was obliged, on account of temporary illness, to withdraw her application for this degree. Miss Dorothy W. Lyon, graduate scholar in Teutonic philology, wrote a thesis on the Latin hymn, *Christe qui lux es et dies*, and its early Dutch, German, and English translations. Miss Lyon has brought to light in her paper, from a Flemish manuscript in the possession of Dr. Collitz, a hitherto unknown translation from the end of the fifteenth century, which is apparently the oldest metrical version of the hymn, *Christe qui lux es*, with the exception of the Middle High German version by the "monk of Salzburg." She has fully illustrated the literary and philological questions suggested by this Flemish version by examining both the history of the Latin hymn and that of its mediaeval translations in High German, Low German, Dutch, etc. Miss Caroline T. Stewart, graduate scholar in German and French, wrote several papers suggested by the above mentioned course in comparative Teutonic grammar. One of these deserves to be mentioned especially, viz., a study of the nominative singular of the weak declension, in which Miss Stewart has offered a new and probably correct solution of a difficult and much discussed grammatical question. Miss Susan A. Sterling made a study of the language of Hans Sachs in a paper which contained a detailed philological treatment of the language of one of Hans Sachs' fables.

*German.*

The instruction in German has been given by Dr. Hermann Collitz and Miss Rose Chamberlin.

Graduate classes in German are treated under the head of Teutonic Philology.

The minor and major courses were arranged as usual. Each course consisted of five hours weekly, two of which were set aside for lectures on German literature, delivered in German, while three hours were given to critical reading and prose composition.

In the major course Dr. Collitz lectured two hours weekly on the history of German literature, from the earliest times to the middle of the last century. A few weeks at the end of the course were given to a brief survey of Modern German literature, from Goethe's death to the present time. Once a week the class read, with Dr. Collitz, specimens of Old and Middle High German epic and lyric poems in Modern German translations, selected from Hentschel's *Handbuch der deutschen Litteratur*.

The same class met Miss Chamberlin, one hour weekly, for prose composition, throughout the year, and one hour weekly for a class in Goethe. Selections from *Faust, Part II.*, were prepared and read, and lectures were given by the instructor. In the second semester Goethe's *Lyrics* were studied in the same manner.

The lectures delivered in the minor course by Dr. Collitz illustrated the development of German literature from the middle of the last to the third decade of the present century. The works of Klopstock, Wieland, Lessing, Herder, Goethe, and Schiller received special attention. In connection with the lectures a few specimens of poetry from the eighteenth and nineteenth centuries were read. The time, however, proved too short to do as much collateral reading as would have been desirable. In future years two hours a week should be reserved for lectures exclusively, and a third hour for reading specimens of the more important works treated in the lectures.

The same minor class met Miss Chamberlin three hours weekly throughout the year. The class prepared and read Goethe's *Faust, Part I.*, and lectures were given on the subject, through

one semester. The second semester was devoted to Schiller's *Wallenstein*, studied in the same manner. Both classes met two hours weekly. The class in prose composition met one hour weekly throughout the year.

Private reading, on which examinations were held during the year, was done by the minor and major students, as outlined in the program.

A class in Elementary German was conducted by Miss Chamberlin, five times weekly throughout the year, for the benefit of the students that entered the college without offering or without passing German in their examination for matriculation. After the usual grammar and readers had been studied, the class prepared and read Schiller's *Wilhelm Tell*, Freytag's *Soll und Haben* (shortened edition), Grimm's *Michael Angelo*, Heine's *Harzreise*, and numerous extracts from prose and poetry were read at sight.

A class in German Conversation, attendance on which was optional even for students in the minor and major courses, was held one hour weekly by Miss Chamberlin. The class met somewhat irregularly. This work does not count towards a degree, which doubtless accounts for the uncertain attendance.

#### *Celtic Languages.*

A course of lectures on Old Irish Grammar was given by Dr. Collitz, one hour weekly, to two graduate students in comparative philology. In the first semester a general introduction to the study of the Celtic languages was given, and among other subjects the literary sources for the various branches of Celtic, and the relationship of these branches to each other and to the Aryan languages were discussed. In the second semester the elements of Old Irish Grammar were studied, and some selections read from the texts given in Windisch's *Kurzgefasste Altirische Grammatik*.

#### *French.*

The graduate work in French was conducted by Dr. Joseph Auguste Fontaine, and consisted of three courses of lectures.

The first course was devoted to an historical treatment of four selected chapters of early French syntax ; Latin texts of the classical and mediæval periods together with some of the most important texts of old and middle French were made the basis of study. A second course of lectures was delivered on the tonic and atonic vocalic system of old French, emphasis being laid upon the study of the assonances found in the *Passion du Christ*, *Vie de Saint Leger*, *Vie de Saint Alexis*, *Chanson de Roland*, *Couronnement de Louis*, and *Huon de Bordeaux*. A third hour was devoted to a review of the different theories with which the origin of the French epopee is concerned ; the development, propagation, and transformation abroad of the French *Chanson de Geste* ; the origin of the *jongleurs* and *trouvères* and the important rôle played by them in the literature of the middle ages were also given due consideration.

The work done in the major or second year class was also conducted by Dr. Fontaine ; it has, as usual, included a complete study of the most important French authors of the seventeenth century. Two comedies of Molière, Pascal's *Lettres provinciales*, Massillon's *Sermons choisis* and La Bruyère's *Caractères* were selected for critical reading done in the class-room. The students were made acquainted with the different schools of modern French criticism. Special lectures were delivered on the post-romantic development of French poetry, with special emphasis on the Parnassian school ; the most important works of Leconte de Lisle, Sully-Prudhomme, and Coppée were read and analysed. Exercises in French composition, based on a review of the most important rules of French syntax and on a study of French idioms, were written weekly.

The students of the minor course met Dr. Fontaine twice weekly for lectures on French literature ; these lectures were delivered in French and treated nineteenth century literature, private reading being assigned in the romantic period as represented by Madame de Staël, Chateaubriand, Lamartine, de Musset, de Vigny, Victor Hugo, Gautier, Sainte-Beuve and George Sand. The course ended with a review of the most important prose writers of the eighteenth century. Opportunity was offered during the year for practice in French conversation.

The students in the minor course also met Madame Colin thrice weekly throughout the year, one hour each being spent in critical reading of French writers, in prose composition, and in sight reading of modern plays and short stories introductory to oral practice. The works chosen for special study were two works of Balzac, Victor Hugo's *Les Misérables* (one book), Alfred de Musset's *Pierre et Camille*, Michelet's *La Prise de la Bastille*, About's *L'Homme à l'oreille cassée*, Daudet's *L'Évangéliste*, Loti's *Jerusalem*, Scribe et Legouvé's *Bataille de Dames*, Pailleron's *Le Monde où l'on s'ennuie*, and *Contes choisis* by Daudet.

Parallel private reading from some eighteen recent representative authors was also assigned for the purpose of facilitating the student's mastery of a precise and extensive vocabulary. G. Eugène Fasnacht's *French Composition*, (first year), extracts from the daily press and from English authors such as Washington Irving, John Richard Green and Stubbs furnished the matter for idiomatic translation into French. The work done by the students was corrected with blackboard illustrations in the lecture-room, and individual variants were encouraged and commended.

The students of the elementary course met Madam Colin five hours weekly throughout the year for an introductory course in French required of all whose matriculation examination did not include that subject. The characteristic structure of the language and those features in which French offers the greatest contrast to English were systematically studied, and applied in a daily written drill on the use of forms and inflexions. The course included analysis of sounds, sight reading, and critical translation, beginning with the simplest passages, and ending with difficult passages from contemporaneous writers. The students all successfully stood the test of the spring matriculation examination. The works used were G. Eugène Fasnacht's *French Grammar* (second year), *Reader* (first year), selections from La Fontaine's *Fables*, ten volumes by Xavier de Maistre, Jules Verne, Daudet, Theuriet, Bourget, Hugo.

### *Italian and Spanish.*

The work in Italian was conducted by Dr. Charles Barneaud. No Spanish courses were given, as it had proved impossible to make a satisfactory appointment in Spanish.

The major course in Italian was conducted entirely in Italian after the first three months. It consisted of weekly lectures on literature, translation, reading aloud of selections from the authors mentioned in the lectures, and the writing of Italian. The lectures treated the *Antiche Rime Volgari*, *Dino Compagni*, Dante, Petrarch, Ariosto, Tasso, Metastasio, Goldoni, Alfieri, Silvio Pellico, Manzoni, and Carducci. *Il Canzoniere* of Petrarch, *Le Mie Prigioni*, two comedies of Goldoni, and Alfieri's *Saul* were read in class; Macaulay's essay on Bacon was translated into Italian.

The minor course was conducted in somewhat the same way. Italian texts were read aloud in class; Charles Lamb and Longfellow were used as a basis of translation into Italian; *I Promessi Sposi* was translated in class, and there were frequent lectures on Dante and Petrarch and contemporary writers.

### *Semitic Languages and Biblical Literature.*

The work in this department was conducted by Dr. George A. Barton.

Advanced Hebrew was given two hours weekly throughout the year. This course had for its object the critical reading of various kinds of Old Testament Hebrew and the study of Hebrew syntax. Portions of Deuteronomy, Jeremiah, and the Psalms were interpreted and the whole of Amos and Ecclesiastes. Harper's *Hebrew Syntax* and Driver's *Use of the Tenses in Hebrew* were used in the study of syntax, with reference to the works of Müller, Davidson, and Ewald. Exercises in translating English into Hebrew were assigned throughout the course.

A class in Beginners' Assyrian met two hours weekly throughout the year. In this course the syllabary and the elements of the language were mastered, and selections from the Rassam cylinder of Assurbanipal, the Taylor cylinder of Sennacherib, and the Babylonian account of the deluge were interpreted.

A class in Advanced Assyrian met two hours weekly throughout the year. The class interpreted the whole of the Rassam cylinder of Assurbanipal in the Assyrian dialect, the whole of the Cyrus cylinder in the Babylonian dialect, and devoted some time at the end of the course to the Babylonian contract tablets. This latter part of the course began with a study of the tablets in the Metropolitan Museum of New York, published by Moldenke, and concluded with the interpretation of several unpublished texts. Thus an opportunity was afforded the class to gain some experience in handling originals.

Beginners' Arabic was given two hours weekly throughout the year. The elements of the language were mastered, and selections from the Arabic version of *Genesis* and Brünnow's *Chrestomathie* were interpreted.

A class in Advanced New Testament Greek met one hour weekly throughout the year. As the class was already familiar with New Testament Greek, a course of rapid reading for the interpretation of the thought of entire books was given. The *Epistles* of Paul to the Romans, Philippians, Colossians, and Ephesians were interpreted, also the *Epistle to the Hebrews* and a part of the *Apocalypse*.

A class in New Testament Textual Criticism met one hour weekly during the first semester. Lectures were given on the materials extant for the emendation of the text of the New Testament and the proper method of using them, also on the history of the printed text of the Greek Testament. Reports were made by the class of readings assigned in the works of Scrivener, Tischendorf, Westcott and Hort, and Harris. Independent investigations were undertaken on which written reports were presented.

A course of lectures on the History and Progress of Religious Ideas in the Bible was given two hours weekly throughout the year. The Biblical material was first arranged in chronological order and the development of the more important religious ideas was traced, one at a time, from the earliest times to the close of the New Testament canon. In the lectures the following topics were treated: the idea of God, the Trinity, subordinate supernatural beings, the constitution of human nature, sin, atonement,



punishment, the Messianic idea, and the parousia. Reports were constantly made by the class from the modern literature on the subject, and large parts of the following works were read : W. R. Smith's *Religion of the Semites* and *Prophets of Israel*, Piepenbring's *Old Testament Theology*, Barton's *Tiamat and Native Israelitish Deities*, Toy's *Judaism and Christianity*, Gunkel's *Schöpfung und Chaos*, Bruce's *Apologetics* and *St. Paul's Conception of Christianity*, Wendt's *Teaching of Jesus*, Beyschlag's *New Testament Theology*, Everett's *Gospel of Paul*, Stevens' *Pauline Theology*, Briggs' *Messiah of the Apostles*, and Horton's *Teaching of Jesus*. Special topics were assigned for investigation to members of the class.

The following undergraduate courses were also given by Dr. Barton :

Biblical Literature, forming part of the course in general philosophy, was substantially the same as last year, except that more of the work was done by lectures and by a study of the Biblical text, and less by the use of text-books; and Christian Ethics as usual formed a part of the general philosophy during the second semester. In this latter course the relation of the subject to psychology, philosophy, theology, and philosophical ethics was first outlined, then the character and content of the Christian ethical ideal were presented and the proper method of applying this ideal to various phases of individual, social, and political life suggested.

A free elective course in the Historical Outlines of Christian Thought was given one hour weekly, and covered the same ground as last year.

### *History.*

The instruction in history has been conducted by Dr. Charles M. Andrews. Two graduate courses occupying three hours weekly throughout the year were given. The first course in historical method, definition, and criticism was taken by two students, and was continued during the first semester and for a short time in the second. Then it was given up owing to the illness of one of the students and the withdrawal of the other student, who had taken the work only as a hearer. The second

graduate course in the history of the community was taken by seven students. The lectures, given for the first time this year, traced the history of the primitive community, the manor, vill, parish, and town in England, and the town, county, and township-county in America. The object of the course was to investigate the local constitutional, administrative, and economic history of England and America. In connection with this course a seminary of advanced students was held once fortnightly, at which original papers were read, books reviewed, and topics of general historical interest discussed. Among the subjects upon which papers were written and presented were the following: the *Communitas* in mediæval England; Boon Days on the Ramsey estates; the Guild System; Theories regarding the Origin of the Borough and City; the English Bounty System of the early Seventeenth Century; Illegal Trading in the Middle Colonies during the Sixteenth and Seventeenth Centuries; the New England Town; the Delaware Hundred; etc. Eight students were in regular attendance at the meetings.

The fellow in history concentrated her time and attention largely on the completion of her thesis, begun in England last year, upon "The Commercial Policy of England toward the American Colonies, as seen in the production of Naval Stores." This study was completed and presented to the Faculty for the degree of doctor of philosophy, which was conferred upon her in June, 1896.

The fellow for 1894-5, who remained at Bryn Mawr for another year of study, continued her investigation into the predial life of Ramsey Abbey. Her study is now as complete as it can be made in this country, and it is hoped that the next year, spent in England, will bring the work into final form.

In the undergraduate department two courses, major and post-major, were given.

In the post-major course two lectures weekly throughout the year were given on American Constitutional History to a class of twelve during the first semester, and eleven during the second. Studies of important constitutional documents were undertaken by each member of the class, and reported on to the class at the regular meeting. In American, as in English constitutional

history, we are seriously handicapped by want of books, although the material in the library is excellent so far as it goes. It is pleasant to be able to report that the work of the post-major and graduate classes has been this year especially good ; the reports in the seminary being of a high grade of excellence.

The major course in the history of Europe from the fall of Rome to the treaty of Westphalia was attended, five hours weekly, by seventy students in the first semester and by seventy-three in the second. Regular monthly examinations were held on the private reading with excellent results. Through the contributions of members of the class a considerable number of new books was added to the hall libraries.

### *Political Science.*

The work in this department was conducted by Dr. Lindley Miller Keasbey. No distinctively graduate courses were given in the department this year, as none of the students applying were sufficiently advanced for the work required. A number of the graduate students, however, took the post-major course as graduate work.

Some slight changes were this year effected in the arrangement of the courses given in the department of Political Science, in order to provide a systematic course of undergraduate study covering a period of one, two, three or four years, as desired. As now arranged, minor, major, and post-major courses are all given alternately, thus allowing such students as desire to do so to take a minor, a major, and two post-major courses during the four years of undergraduate study.

The minor and major course given this year covered the history of political and economic theories from Plato and Aristotle down to modern times. A large amount of collateral reading was given out, and once a week the lectures were interrupted by an oral quiz. The class was large, and both the work of the students and the interest displayed were very gratifying to the instructor.

In the post-major course an attempt was made to trace the course of the social evolution of western civilisation, from savagery and barbarism, to modern civilised times. The lectures

were descriptive ; collateral reading was given in the theories of eminent sociologists ; and each student was required to write a thesis embodying the results of her investigations into the social conditions of some savage tribe or barbarous people. These theses required somewhat extensive research into the domain of descriptive sociology, and they were, without exception, creditable pieces of work.

The minor and major course next year will be in economic geography and demography. The post-major course will cover the history of sociological theory. Graduate courses will also be offered in American institutions and American commerce.

The instructor again wishes to express his appreciation of the earnest enthusiasm of the students and the hearty co-operation of the college authorities in furthering his work.

### *Philosophy.*

The work of this department was conducted by Dr. Dickinson Sergeant Miller.

A graduate course in the Idealistic Philosophy of the Nineteenth Century was given equivalent to five hours weekly.

The major course was divided into the Philosophy of Descartes, Spinoza, and Leibnitz, three hours weekly, and the Philosophy of Nature, two hours weekly. The latter course analysed and discussed various works on the constitution and fundamental laws of nature and the logic of science.

The required introductory course in Logic, Psychology, Elementary Philosophy, and Ethics was given four hours weekly, with an average attendance of fifty-five students. In the logic the experiment was made of following up the study of Jevons' *Lessons in Logic* with a logical analysis and discussion in class of J. S. Mill's argumentative volume on *Liberty*. In psychology, James' briefer text-book was as usual employed. As usual, too, in the elementary philosophy, while Royce's *Spirit of Modern Philosophy* was read by the students privately, certain primary problems were taken up in class for regular debate, under the guidance of the instructor. This year an introduction to philosophical ethics was also attempted as a supplement to Dr. Barton's lectures on ethics.

*History of Art.*

This department was opened for the first time this year under the charge of Mr. Richard Norton. As the department is a new one, the extracts from the subjoined report are given as written in the first person :

To the President of Bryn Mawr College.

Madam : I have the honor to present the following as the report of the first year of work by the Fine Arts Department.

The work started under great difficulties and continued under lesser ones. The chief of these, however, might soon be obviated by the continuance of such liberality as has already been exhibited toward the department by well-wishers of the college. When I reached the college last October I found that, with the exception of a few books ordered, at my request, during the preceding summer, the library contained almost no books that would be of service to me in the work I desired to do. As for photographs, which are absolutely necessary for the satisfactory teaching of the history of the Fine Arts, I found that the collection owned by the college was extremely inadequate. These deficiencies in the way of books and photographs were immediately greatly lessened by the generosity of Miss Garrett, who gave to the department the sum of \$1,300, and in addition lent to it her large private collection of photographs; another valuable collection of photographs was also lent for an indefinite period. The college had already granted the department \$600, and the students, having collected among themselves some \$300 to be spent on a memorial of Dr. Rhoads, voted that it should be expended for this purpose by the Art Department. These various sums amounted to nearly \$2,200, a large sum, but one by no means large enough for what was and still is needed. One is apt to forget that the expenses of this department are, of necessity, larger than those of many others. The department, dealing, as it does, with ancient, mediæval, and modern art, is triple in its nature and is absolutely dependent on a very large supply of books and photographs. Most of the books required are costly, and the photographs need mounting and expensive cases for their preservation. For these

reasons it is that \$2,200 is by no means a large sum on which to found the department, and the college must realise that if it wants the department to maintain a high standard of work, if it wishes to enable the department not only to teach the students a certain amount of useful and cultivating information, but also to implant in them an enduring interest in certain subjects which have always been considered of primal importance in the development of character, it must spend liberally and readily for its support. By means of the \$2,200 above referred to, the department now has a small but comprehensive and useful library of the most necessary books, and a very good collection of the more easily obtainable photographs. There are of course noticeable and much to be regretted gaps in these collections, but it will be found that these are in the main due to the lack of many of the more expensive books and series of photographs. It may be long before these are filled, but it is to be hoped that it will not be long before friends of the department realise that these gaps offer an opportunity to testify their friendliness. Such works as the two histories of Italian painting, by Crowe and Cavalcaselle, or such a series of photographs as the Brunn-Bruckmann *Denkmäler* are examples of the works of high price, the purchase of which the means of the department will not at present permit, and which we must hope will come to the college as gifts. The means of instruction now existing would be sufficient for a very small number of students to use with fairly satisfactory results, but judging from the numbers that took the courses offered in 1895-96 and the numbers of those who have inquired about the work for 1896-97, it seems likely that the classes will be large.

In the year 1895-96 the course in the History of Italian Art was attended, during the first semester, by some forty-five students; during the second semester, by about sixty. The numbers in the course on the History of Greek Art, which appeals less than the former to the undeveloped intelligence, during the same periods, were about fourteen and twenty. The students evidently were interested.

There is still one thing more to which attention must be drawn. To teach the history of sculpture with only photo-

graphs by which to give the students an idea of the monuments under discussion is very difficult. A photograph showing, as it does, but one side of an object, and that side distorted, cannot give the student a full and correct impression of an object in three planes. Furthermore the photograph reduces the object so much that it gives a false notion of the original. Why then depend on photographs? Now-a-days when plaster casts are so numerous and cheap there is no reason why Bryn Mawr should not own a small collection of them housed in a suitable building. By means of these the student could get a good idea of what an ancient statue truly looked like, and would be able to study in detail the advance or retrogression of the various generations in a way quite impossible to do with photographs. Photographs of pictures are unsatisfactory, but photographs of sculpture are still more so. I have the honor to be, Madam,

Respectfully yours,

RICHARD NORTON.

### *Mathematics.*

The graduate work was conducted by Dr. Charlotte Angas Scott and Mr. James Harkness. Dr. Scott lectured two hours weekly throughout the year on Transformation; the first few weeks were devoted to a discussion of the general theory of Cremona transformation (the birational transformation of a plane), the greater part of the year being reserved for the birational transformation of a plane curve. On account of the method adopted, which differed very much from the usual presentation, the subject being treated in minute detail as regards the actual processes and results of transformation, it was not possible to assign very much collateral reading; however, the parts of Salmon, *Higher Plane Curves*, and Clebsch-Lindemann, *Vorlesungen über Geometrie*, bearing on this were carefully read, with additional references to Bertini and others. The members of the class devoted much time to written work in connection with the lectures.

Mr. Harkness lectured two hours weekly throughout the year on the application of Riemann's methods to the discussion of algebraic functions and Abelian integrals. The course began

with an account of the general properties of analytic functions of a complex variable. As the members of the class were familiar with the principal theorems in the Theory of Functions, this part of the course occupied only a small part of the first semester ; the rest of the year was devoted to the subject proper of the lectures, viz., Abelian integrals. The class read carefully the volume of MM. Appell and Goursat entitled *Fonctions Algébriques* ; references were given to the works of the principal writers in this region of modern pure mathematics.

The undergraduate classes, required, minor, and major, were conducted in conformity with the program. The subjects there assigned are so definite and well-established that practically no variation can be expected or desired from year to year ; whatever the arrangement of the more advanced mathematics may be, a sound knowledge of these subjects is an indispensable preliminary. It is, however, very desirable that students should have an opportunity of acquiring some knowledge of geometrical conics, partly for the sake of the subject itself, partly on account of its utility in physics. The matter is one that demands careful consideration.

Four hours of post-major work were offered, this being as much as it is possible for the department as at present organised to undertake. It would be an advantage if the full five hours could be offered regularly, as the present arrangement presses hardly on students needing exactly five hours of elective work, in some cases even preventing them from taking mathematics to complete their degree work. A certain rotation of subjects is preserved in the post-major work, and accordingly it is possible for students to attend for two or three consecutive years. Dr. Scott lectured on modern pure geometry, following the lines of Reye, *Die Geometrie der Lage*, this being assigned as the text-book ; this particular course had not been offered for several years, and the class was accordingly unusually large, graduates as well as undergraduates being enrolled. Mr. Harkness lectured on the theory of binary forms. The subject was treated slightly from the symbolic side ; that is, the methods employed were those of Clebsch and Gordan. The text-book used was Gordan's *Invariantentheorie* ; at the same time many references



were given to Elliott's *Algebra of Quantics*, in order that the work of Cayley and his followers might not be overlooked.

The formation of a Journal Club, to receive reports on special topics and listen to outline accounts of interesting theories that do not naturally present themselves in the regular graduate work, has often been considered, but always with the result that it was not thought advisable. But the fact that so many of this year's graduates expect to continue their studies here during the year 1896-97 points to the present time as most suitable for the experiment. It is therefore proposed to form such a club early in the academic year.

One topic that might naturally claim attention at the meetings of the club will be otherwise and more satisfactorily provided for. Ever since the discovery of systems of geometry other than that of Euclid, much attention has been paid to the true foundations of geometrical science, these being discussed in their philosophical as well as their mathematical aspect. No one can for a moment regard the question as settled even yet; and the controversies arising out of the discussions have a far-reaching effect on parts of mathematics that are apparently remote. Consequently it is with very special gratification that the mathematical department looks forward to a course of six lectures on the "Foundations of Geometry," to be delivered in November, 1896, by the Hon. Bertrand Russell, Fellow of Trinity College, Cambridge, who comes from England to deliver these lectures in response to the invitation of the Trustees of Bryn Mawr College. These lectures will be on the lines of Mr. Russell's book on the subject, shortly to be published by the Cambridge University Press.

During the year Miss Isabel Maddison, who had previously fulfilled all the requirements as to residence, has obtained the degree of doctor of philosophy. Her dissertation, "On Singular Solutions of Differential Equations of the first order in two variables, and the Geometrical Properties of certain Invariants and Covariants of their complete Primitives," will appear in the next number of the *Quarterly Journal of Mathematics*. There has also appeared during the year, from the press of R. Drummond, New York, the first dissertation presented to the mathematical department, namely a monograph "On the forms of

plane Quartic curves," by Miss Gentry, on whom the degree of doctor of philosophy was conferred in 1894.

As regards the library, we have gratifying progress to report—progress so encouraging as to make us aim even higher than before. Ever since the opening of the college the object that has been kept most steadily in view has been the acquisition of complete sets of periodicals, these being indispensable in all advanced mathematical work. In the spring of 1895, the total absence of the Italian journals was very seriously felt; but thanks to the generosity of an anonymous donor, who undertook to supply the deficiency up to a certain limit, we were enabled to secure a specially fine copy of the *Annali di Matematica pura ed applicata*, as well as a complete set of the *Rendiconti del circolo matematico di Palermo*. During the year just closed, an additional gift has made it possible for us to obtain complete sets of the following journals: *Bulletin de la Société mathématique de France*, *Jahrbuch über die Fortschritte der Mathematik*, *Zeitschrift für Mathematik und Physik*, as well as the missing volumes of the *Annales scientifiques de l'Ecole Normale supérieure*, and the *Acta Mathematica*. The department will, we hope, ultimately have a very valuable working library of periodicals: towards this we have still to secure, to mention only the most obvious deficiencies, the *Proceedings of the London Mathematical Society*, the *Messenger of Mathematics*, the *Giornale di Matematica* (Battaglini), etc. The acquisition of a complete set of a periodical is of course accompanied, more generally preceded, by a subscription to the regular issue. This constitutes a very heavy drain on our resources, the present state of the case being that fully two-thirds of our annual appropriation is thus automatically expended, quite apart from occasional expenditure in making up sets. The result is that every year we are more behindhand in the matter of standard books, for which advanced students have to rely to a great extent on the private libraries of the instructors. Only an increased annual appropriation would enable us to properly apportion our expenditure between periodicals and standard works.

Another section of mathematical equipment is with us absolutely non-existent, thus giving to Bryn Mawr an unenviable 'dis-

tion among American colleges. We have not even the nucleus of a collection of models. Even if geometrical figures be a figment of the imagination, the models would be of immense service in instructing the imagination to feign correctly. If such a collection were once started, on a scale extensive enough to invite additions, we should hope to see it gradually enlarged, until it assumed its proper importance; and from the very first its utility would be felt in all the divisions of mathematical work.

### *Physics.*

The department of physics is under the charge of Dr. Arthur Stanley Mackenzie and Dr. Edgar Buckingham.

A course of lectures to graduate students on the theory of electricity and magnetism was given by Dr. Mackenzie three times weekly throughout the year. The treatise of Maxwell was used as a basis for the lectures; or, at times, when the text of that book was followed very closely, it was read with the class. The lectures treated of the criticisms of Maxwell's theory and its exposition by Poincaré, Boltzmann, and Drude, and the class read privately parts of these authors, Duhem, J. J. Thomson and others. The last weeks of lectures were devoted to a study of electromagnetic waves, with special reference to their treatment in J. J. Thomson's *Recent Researches in Electricity and Magnetism*. As both the students taking this course had studied in the graduate physics department previously, and were well prepared to enter upon the discussion of this difficult subject, a great deal of ground was covered and particularly good progress made.

One of the students in this class devoted considerable time to work in the laboratory. As a preparation for original work in the future, she made experiments on the rates of tuning-forks, the absolute value of the capacity of a condenser, the permeability of iron wires, etc., according to well-known methods, and tried for herself to overcome the difficulties that must arise by devising means of meeting them, thus acquiring some of that self-reliance which is essential for independent work. The present tendency toward putting undergraduate or even newly made graduate students to work at a so-called "original investigation"

is deemed by this department entirely unwise and not attended with good results to the student ; and it is thought the cause of science will not suffer while the student is gaining a discipline and a more thorough preparation for her work.

The meeting of instructors and advanced students three times a month to hear reports upon the current articles in the physical and physico-chemical journals again proved to be one of our best means of preparing students for a proper appreciation of methods and results. In the seminary articles were prepared upon the following topics : Michelson's interferential refractometer, its applications to the analysis of light vibrations and to the determination in wave-lengths of the standard of length ; thermodynamic potential ; recent determinations of spectral lines with special reference to Kayser and Runge's work, and the liquefaction of gases and the critical state of matter.

It is in the preparation of these seminary articles that the smallness of our number of physical journals has been most keenly felt. It is a source of great satisfaction and encouragement to the physical department that, at the close of the present year, the President, out of a gift to the library funds, has seen her way to help us to buy a complete set of Poggendorff's and Wiedemann's *Annalen*. This will prove a very valuable accession to our teaching appliances. We have now complete sets of the *Annalen*, *Philosophical Transactions*, *Philosophical Magazine* and three lesser journals, and are in a position to undertake graduate instruction. But it is only a beginning, and a determined effort must be made, at all sacrifices, to build up the library, so that we may hold our own with other institutions offering opportunities for graduate study.

Dr. Buckingham delivered two post-major courses ; he lectured once weekly during the first semester on the elements of sound as related to music. The earlier chapters of Helmholtz's *Sensations of Tone* were closely followed. The work was unsatisfactory on account of inadequate equipment for experiments in sound. It would take at least a thousand dollars worth of instruments to enable such a course to be given satisfactorily, and until we can get a proper outfit it will be impossible to provide for students who wish to learn something

about the scientific side of music. Dr. Buckingham also lectured two hours weekly throughout the year on the elements of physical chemistry. The work had to be very elementary in character in order to adapt it to all the students. The course will not be given again unless the students electing it have had at least three five-hour courses in physics and chemistry, one in one subject and two in the other. The work of the department has been helped greatly by the possibility of driving our tools by steam, caused by the removal last autumn of the engine from the fifth floor to the basement.

The work of the undergraduate classes was carried on by Dr. Mackenzie and Dr. Buckingham in the usual way. The lectures delivered to the major class covered more ground than usual, special attention being given to heat, thermodynamic potential and its applications to a variety of problems. In the minor class the work both in the class-room and laboratory was up to the average and quite satisfactory.

As announced in the report of the department for last year, a skilled mechanic, Mr. Banner, has been added to the department. After the trial of a year and a half we are better able to appreciate such an addition, and realise the impossibility of going back to our earlier condition. During the autumn of 1895-96 Mr. Banner aided in setting up the engine and dynamo, and then devoted his time to bringing the shafting into the work-shop and putting all the machinery in order for the introduction of steam-power. After Christmas he set up the apparatus for the Rowland grating, and now the spectrum analysis laboratory is completely ready for work. In addition to a general overhauling of all the physical apparatus and the making of numerous repairs, he has made many new pieces of apparatus, including a heliostat, three tangent galvanometers, two switch-boards for the dynamo room, four wheatstone bridges, a magnetometer, photometer bench, etc. The fact of our having a skilled workman means much more than the saving of money in buying this apparatus; it means that it exactly suits our particular conditions, and that the design of a piece of apparatus can be changed while it is in process of making, if it should be

found necessary. We shall now be able to make much of the apparatus required for advanced students in the laboratory. Our stock of tools has been largely increased, but a new and more accurate lathe is urgently needed.

### *Chemistry.*

The work of the department was under the charge of Dr. Edward H. Keiser and Dr. Elmer P. Kohler.

The total number of students that took courses in chemistry during the past year was seventy-two. Of these six took graduate and post-major work, twenty-two the major, and forty-four the minor courses.

The graduate and post-major students attended a seminary course in theoretical chemistry conducted by Dr. Keiser, a course in advanced organic chemistry given by Dr. Kohler, and a weekly journal meeting.

In theoretical chemistry Nernst's text-book was used as a guide. After making a careful study of the general properties of matter as exhibited by solids, liquids, gases, and dilute solutions, the laws of stoichiometry and the methods of determining atomic and molecular weights were taken up; and the semester's work was closed by a discussion of atomic and molecular theories. The second semester was devoted to the study of the law of mass action in its application to homogeneous and heterogeneous equilibrium.

In the advanced organic chemistry Bernsthen's *Organic Chemistry* was used as a guide. After a brief consideration of the present views as to the nature of organic compounds, the most important classes of aliphatic compounds were taken up for detailed study. In addition to the regular work special subjects, of particular theoretical or practical importance, were assigned to the different members of the class, with full references to the original literature, and a part of each hour was devoted to a discussion of the papers prepared. Among the subjects assigned were the following:—the occurrence of petroleum and the theories as to its origin; the structure and properties of the nitro-paraffins; alcohol and the theories of etherification; synthesis involving the use of metallo-organic compounds;

stereo-chemistry of carbon ; relation between the structure and electrical conductivity of acids. In the journal meetings the instructors and graduate students reported on the most important papers in current chemical literature.

The laboratory work of the graduate and post-major students began with the preparation and analysis of typical carbon compounds. After sufficient proficiency in these processes had been obtained the students passed on to research work under the direction of the instructors. The problems studied were the action of magnesium upon organic compounds ; the preparation of allylene ; acetylene and allylene sulphonic acids ; the dissociation of cadmium ammonium chloride and aliphatic sulphonic acids.

The major and minor courses were given as outlined in the program. An increase in the staff of demonstrators made it possible to devote greater attention to the correction of the students' note-books. All members of the minor class were required to hand in carefully prepared notes covering the work done in the laboratory and the parallel reading required in connection with the laboratory work.

With the recent additions to the reference department of the chemical library the department is fully equipped for all kinds of work that it attempts to do with the exception of the advanced work in organic chemistry. In consequence of the large number of students in the major and graduate courses during the last few years the original stock of organic chemicals is almost completely exhausted. A certain class of organic compounds is absolutely necessary for profitable work in organic chemistry. These substances cannot be made to advantage on the laboratory scale, and most of them cannot be bought in this country when needed. It is necessary, therefore, to keep them in stock. It is very desirable that a special fund be set aside for this purpose, as the regular allowance is required to meet the current wants of the laboratory. The department urges this the more strongly since the increasing number of students who take chemistry as a part of a preliminary medical course makes it desirable to devote as much time as possible to organic chemistry.

*Geology.*

This department was open for the first time this year, and placed under the charge of Dr. Florence Bascom. The following report is given in the first person as written by Dr. Bascom.

To the President of Bryn Mawr College,

Madam : I beg leave to submit the following report of the geological department for the academic year 1895-96.

In this department a post-major course was conducted by means of lectures, two hours weekly throughout the year, with laboratory and field work. A general survey of the entire field of geology was embraced by the lectures. During the first semester special attention was devoted to the lithology, dynamics, and structure of the earth's crust. The origin and nature of the materials forming the crust having been treated in some detail, methods of determining minerals of economic value, rock-forming minerals, and rocks were discussed in the lecture-room and applied in the laboratory. A private collection of sections and hand specimens of foreign and American rocks and minerals (about one thousand), and some five hundred museum specimens were at the disposal of the students. The students also determined all specimens collected upon the excursions. In connection with the succeeding lectures upon dynamical and structural geology, hypothetical cases of structure were given to the students for independent solution. The student was trained in the field to take all necessary observations, to interpret topographical and geological maps, and to solve some of the simpler problems of structure.

Historical geology and palæontology occupied the second semester. This course was illustrated by Zittel's palæontological charts, and was accompanied by a study of fossils. The student was expected to become familiar with the typical fossils of each geological period, thus gaining not only a distinct impression of the flora and fauna of the successive formations, but also the ability to separate these formations by means of their characteristic fossils. Owing to the deficiency of the college collection in vertebrate remains, this study was largely confined to invertebrate fossil life. It is absolutely essential that such a collection



should be eventually obtained as shall illustrate the evolution of life in its entirety.

This course was concluded by a lecture from Professor Edward D. Cope, of the University of Pennsylvania, upon the argument for evolution derived from the palæontological record.

Frequent excursions were conducted throughout the year in the immediate vicinity of Bryn Mawr, and as the course progressed a more extended trip was taken. The college is so fortunately situated as to command, within easy reach, representatives of all the formations of the geological column, from the pre-Cambrian crystallines of Bryn Mawr to the recent unconsolidated sediments of the coastal plain. The ancient, complexly folded, extremely metamorphosed rocks of the Philadelphia belt are of peculiar interest and present peculiar difficulties to the student, and supplemented by adjacent simple, unmetamorphosed sediments, furnish illustrative material of unusually high order. A trip was made in the spring into New Jersey, where the Pleistocene and Cretaceous gravels, sands, and clays were examined and fossils collected. This excursion was rendered of special value to the students by the presence of Dr. Clark, of the Johns Hopkins University, who has made a careful study of the Cretaceous formations of New Jersey. In order that the students might profit still further by their peculiarly fortunate environment, a trip was planned to the mountains, where Palæozoic and Mesozoic sediments in an intermediate stage of metamorphism are displayed, but owing to the pressure of other work upon the time of the students, the trip was abandoned. It is to be deplored that more time cannot be given to excursions. Besides field and laboratory work the students were assigned recent geological papers of importance upon which they reported. These reports were followed by informal discussions. Nine students availed themselves of this post-major course, three graduate and six undergraduate students.

The course in mineralogy offered exclusively to graduate students was not given this year.

The department has been very fortunate in the donations which it has received. For a course in geology so much is essential in the way of comprehensive mineral, rock, and fossil collec-

tions, charts, models, maps, complete sets of survey reports, journals, proceedings of scientific societies, author's separates, etc., that the difficulties which beset the first years of such a course are great.

Had not the outfit purchased with the college funds (a petrographical microscope, Zittel's charts and the nucleus of a library) been supplemented by generous donations and by the private collections and library of the instructor, a geological course in any degree satisfactory would scarcely have been possible. The Johns Hopkins University, through Dr. Clark, has given the department a good working collection of invertebrate fossils and a large number of mineral and rock specimens. Amherst College, the Ohio State University, the University of Wisconsin, and the California Mining Bureau are notable among the institutions that have freely added to the collections of the college, while the names of all the well-known geologists are found on the list of donors. Author's reprints, the publications of scientific societies, and state surveys have been generously given when asked for. The reports, monographs, bulletins, and maps of the United States Geological Survey have been secured. Several of the alumnae of the college have interested themselves most efficiently in procuring books and specimens for the new department. From this source also has come a gift of money, with which much needed volumes were purchased. By these means over a thousand specimens have been secured, and the value of the library quadrupled.

Both instruction and research work are still seriously hampered by the lack of complete sets of foreign and American geological journals. It is imperatively necessary that these should be obtained.

It seems desirable that in connection with the biological courses opportunity should be furnished for palæontological study. A petition for such a course has already been received, and could be granted if suitable additions to the library and museum could be made; but a selected collection of vertebrate remains and the volumes of the New York Palæontological Survey are essential additions for this course.

Besides instruction, the formation of the collection, systema-

tising, and labelling of the museum, the acquirement of a library and all the necessary outfit of a new department, and the completion of some lines of research entered upon before coming to Bryn Mawr, a considerable beginning has been made upon a detailed mapping of the Philadelphia belt. A large number of thin sections of the Bryn Mawr rocks have for the first time been made and studied. It is hoped that some results of this investigation may be published in the near future.

Appended is a list of donors and donations.

Respectfully submitted,

FLORENCE BASCOM.

*Appended list of donations received by Dr. Bascom for the Geological Department of Bryn Mawr College :*

Amos Wickersham, 72 High Street, Philadelphia, Penna., Devonian Fossils from Venango Co., Penna., and photograph of the "Indian God Rock"; Prof. J. C. Smock, State Geologist, Trenton, N. J., State Reports of New Jersey (3 vols., 5 bulletins); Prof. J. F. Kemp, Columbia College, New York City, two Separates; Prof. O. C. Marsh, Yale University, New Haven, Conn., two charts (extinct vertebrates); J. S. Diller, U. S. G. S., Washington, D. C., six Separates and Atlas 15; N. H. Darton, U. S. G. S., Washington, D. C., twelve Separates; G. P. Merrill, U. S. G. S., Washington, D. C., twelve publications of the U. S. National Museum, Smithsonian Institute; Bailey Willis, U. S. G. S., Washington, D. C., five Separates and Thirteenth Annual Report of U. S. G. S.; Prof. H. L. Fairchild, Rochester University, N. Y., Separates (promised); Geological Survey of Pennsylvania, Philadelphia, Penna., last volume of Reports will be sent when out; Dr. C. R. Keyes, State Geologist, Missouri Geological Survey, Jefferson City, Mo., complete set (promised); Provost Uhler, Peabody Institute, Baltimore, Md., publications and set specimens (promised); Dr. E. A. Smith, State Geologist, Montgomery, Ala., four Separates; Dr. U. S. Grant, Assistant State Geologist, Minneapolis, Minn., set of Minnesota State Reports with seven Separates; Prof. J. C. Branner, Leland Stanford

University, Cal., set of Reports of Arkansas, fourteen Separates ; Dr. F. D. Adams, McGill University, Montreal, Canada, Permanent Exchange List, Separates ; Miss M. H. Hilles, Wilmington, Del., books (promised) ; Miss L. S. Brownell, 322 W. 56th Street, New York City, N. Y., partial set of Transactions, N. Y. Academy of Science (promised) ; California Mining Bureau, San Francisco, Cal., 151 specimens and Maps ; Miss L. V. Sampson, Philadelphia, Penna., \$10, (five volumes purchased), Lyell's *Principles of Geology*, Rogers' *Survey of Pennsylvania* ; Dr. T. C. Chamberlin, Chicago University, Chicago, Ill., five Separates ; Prof. Joseph Le Conte, University of California, Berkley, Cal., three Separates ; Dr. L. V. Pirsson, Yale University, New Haven, Conn., five Separates ; G. K. Gilbert, U. S. G. S., Washington, D. C., thirteen Separates ; Dr. Wm. B. Clark, Johns Hopkins University, Baltimore, Md., large collection of fossils and rocks ; Dr. E. B. Mathews, Johns Hopkins University, Baltimore, Md., minerals ; Prof. B. K. Emerson, Amherst College, Amherst, Mass., collection of minerals ; Prof. C. R. Van Hise, University of Wisconsin, Madison, Wis., minerals ; Prof. Heilprin, Philadelphia Academy of Natural Sciences, Philadelphia, Penna., minerals (promised) ; Prof. E. D. Cope, University of Pennsylvania, Philadelphia, Penna., one Separate ; T. D. Rand, Radnor, Penna., good collection of minerals and Separates ; Miss Helen Middleton, 412 W. Cheltenham Avenue, Philadelphia, Penna., mineral specimens ; Dr. Edward Orton, State Geologist, Ohio State University, Columbus, Ohio, Ohio State Reports (2 vols.) ; Harvey Weed, U. S. G. S., Washington, D. C., eight Separates ; Prof. James Hall, State Geologist, Albany, N. Y., State Reports and Papers, (promised specimens if selected) ; J. A. Holmes, State Geologist, Chapel Hill, N. C., Reports, North Carolina (promised) ; Dr. F. J. H. Merrill, New York State Museum, Albany, N. Y., Publications and Maps (7 vols.) ; Miss E. F. Byrnes, Philadelphia, Penna., mineral specimens ; Frank L. Nason, New Brunswick, N. J., twenty specimens, New Jersey State Reports (early), eight Separates ; Prof. Wm. M. Davis, Harvard University, Cambridge, Mass., Separates ; Prof. J. C. Russell, Michigan University, Ann Arbor, Mich., National Geographic Monograph ; Prof. A. T. Winchell, Minnesota University,

Minneapolis, Minn., Separate ; Prof. J. J. Stevenson, University of the City of New York, N. Y., thirty-four Separates ; Land Office, thirty Land Office Maps ; U. S. Geological Survey, 10 volumes Annual Reports, 20 Atlas folios, 11 Monographs ; Lewis Woolman, Philadelphia, Penna., one Separate ; Henry Holt & Co., *Geological Biology* (1 vol.) ; Prof. Wm. North Rice, Wesleyan University, Middletown, Conn., one Separate ; Prof. C. H. Hitchcock, Dartmouth College, Hanover, N. H., three Separates ; Prof. H. S. Williams, Yale University, New Haven, Conn., nineteen Separates ; Prof. W. O. Crosby, Massachusetts Institute of Technology, Boston, Mass., eighteen Separates ; C. H. Smith, Jr., Hamilton College, Clinton, N. Y., nine Separates ; Dr. Andrew C. Lawson, University of California, Berkeley, Cal., thirteen Separates ; W. S. Blatchley, State Geologist, Indianapolis, Ind., set of State Reports ; T. C. Hopkins, State College, Centre Co., Penna., two Separates ; L. L. Hubbard, State Geologist, Houghton, Mich., State Reports (3 vols.) ; Wm. F. E. Gurley, State Geologist, Springfield, Ill., State Bulletins (3-8) ; S. F. Emmons, U. S. G. S., Washington, D. C., fourteen Separates ; Miss Helen Bartlett, 107 Randolph Avenue, Peoria, Ill., Illinois Reports (5 volumes) ; Prof. Orville A. Dewey, Sao Paulo, Brazil, S. A., eleven Separates ; Miss Mary Flexner, Louisville, Ky., ten Volumes and thirty-one Bulletins, Reports of Kentucky Geological Survey ; Miss Susan G. Walker, Washington, D. C. (through Senator Allison), 113 Bulletins U. S. G. S., twenty Monographs ; U. S. G. S., twenty-one Monographs of the Geological Survey, Reports of the Mineral Resources of the U. S. (6 vols.)

### *Biology.*

The biological work was conducted by Dr. Thomas Hunt Morgan and Dr. Joseph W. Warren, assisted in the laboratory by Dr. Harriet Randolph and two student assistants.

The number of students in the department of biology during the collegiate year, 1895-96, was larger than ever before. Owing to this unexpected increase the resources of the department were taxed to their utmost in order to supply material and apparatus to the students enrolled.

The activity in the graduate department has also been greater than ever before and the results accomplished have been far more satisfactory. Seven students took full graduate work with Dr. Morgan in morphology. The following investigations have been carried on in the morphological laboratory:—(1) the origin of the mesoderm of the limbs of amphibia; (2) the fertilisation of the egg of limax and the history of the centrosome; (3) the development of amphipod-crustacea; (4) experimental studies in the development of the chick; (5) the fertilisation of the egg of the toad; (6) the development of spina bifida embryos of the frog; (7) the structure of a new balmoglossus from the Bahamas; (8) the development of hylodes from Jamaica.

It would be a great help to our graduate work if we could have a course of lectures on the history of zoology and physiology. Students who take their degree of doctor of philosophy in biology are expected to know something of the philosophy and history of zoology, but the large amount of current biological literature absorbs at present almost all the time and attention of our graduate students. I think, however, that a course of historical lectures would serve to draw the attention of the students to this side of their work. Finally, there is a most serious need in the advanced morphological laboratory. The students are supplied with small Zeiss microscopes that are entirely inadequate for their work. The great importance of good microscopes is recognised everywhere, and in all the best advanced laboratories the students are supplied with large stands, good illuminating apparatus, and high lenses. We are in great need of one large Zeiss stand with suitable lenses. Such a piece of apparatus would cost at least \$250. In addition we need three or four smaller stands for general work in the graduate laboratory. Further we have only one microtome that is of use for accurate work, and this microtome is now too much worn out by use to be of very great service. Moreover one large microtome is insufficient with the present number of graduate students. We need a new Thorne microtome; such a machine costs about \$75.

The usual course of graduate lectures was given by Dr. War-

ren. During the first semester and a portion of the second the more important points in physiological graphics were considered and discussed, there being three students in attendance. After this the interstitial secretion of glands was taken up in considerable detail with especial reference to recent advances in our knowledge of the suprarenal capsules, the pancreas, and the thyroid gland. This part of the course was heard by four students.

Graduate research work was done in the physiological laboratory by one student with much faithfulness. She studied the post-mortem contraction of muscle under the influence of varying temperature. A large amount of valuable material has been collected in the form of graphic records showing the extent and the time relations of such contractions.

The equipment of the laboratory has steadily improved during the year and the advantage of having a skilled mechanic at hand has been frequently and amply demonstrated. Mr. Banner has had regular work in making instruments and other appliances of great and varied use to us. We have thus been able at slight expense to arrange a convenient apparatus for ergographic work, and also to make a neuramoebimeter of the Bowditch pattern. Neither of these could have been made without the aid of a skilled workman. It is unnecessary to enumerate the various smaller articles (clamps, electrodes, holders, etc.) which have been made in the workshop for the laboratory, and which are in constant use.

Six students have done full post-major work in morphology with Dr. Morgan ; five graduate students have also taken a part or all of this course. This year the work has been entirely on the embryology of vertebrates. During the last few years we have collected a sufficient amount of material, so that the main types of development of the vertebrates can now be examined in the laboratory. At the end of this part of the work each student is assigned some simple problem that she may work out, and learn in this way something of the methods of original research, or at least make a beginning in this direction. During the past year the following subjects have been assigned members of the class for special study: (1) the later stages in the

development of the brain ; (2) the origin of the primitive streak ; (3) the opening of the gill-clefts in the chick ; (4) the origin of the neurenteric canal in the chick ; (5) the development of the subnotochordal rod in the frog and newt.

There is great need, at present, of a course in post-major zoology that may serve in part as a review of the course in zoology (major course, second semester), and in part as an extension of the major work in zoology. Some of our graduate students, in the first year of their work, would also profit greatly by such a course. With our present corps of instructors it is impossible to attempt to offer this course.

Dr. Warren gave a course of post-major lectures on the Structure and Functions of the Central Nervous System. This was regularly attended during the first semester by seven undergraduates and two graduates, in the second semester by six undergraduates and three graduate students. The course was also attended by one hearer. Laboratory work in post-major physiology was undertaken by five students in the first semester. Two of these divided the laboratory course between morphology and physiology, the other three worked in physiology alone. One of the latter was obliged by illness to drop this work early in the year. In the second semester laboratory work was carried on by two students. One of these has made a long series of experiments (in both semesters) using a modified form of the ergograph. She has been assisted by a number of undergraduates, who have kindly consented to submit to considerable personal discomfort to enable her to procure a large number of ergograms of women.

During the academic year, 1895-96, Dr. Warren's instruction in the ordinary undergraduate courses in biology has covered the same ground and occupied the same period of time as in previous years. The attendance has been good and the work of the students, as regards lectures and examinations, has been fully up to the average. In the laboratory courses the work has been of unusual excellence.

The major class and the post-major class filled completely the major laboratory. The class in zoology carried out the prescribed course of study announced in the program, under Dr.



Morgan. This course on zoology is much too short and incomplete to give the students a good basis for further work in zoology. A complete semester's work ought to be devoted to the subject. Fortunately many of our students now go to the Wood's Holl Laboratory for the summer, where the course in Marine Zoology helps to give these students a farther knowledge of invertebrate animals. Dr. Warren met the class as usual for physiology.

In the minor class there were fifty-three students. Our minor laboratory had all the available places filled, and in one case we admitted a student only on the condition that she should supply her own microscope. Although the college increased our supply of microscopes this year, still we found it necessary that three classes, minors, majors, and post-majors, should use the same microscopes. This use of the same microscopes by two or three students makes it impossible for us to make any one student responsible for damages done to the microscope while in use. Although on the whole the work in the minor year was the same as heretofore, the work on the different groups of insects could not be so fully carried out as in former years owing to a lack of material for so large a class. The increase in the number of students involves a great deal of additional work for the instructors. This has been felt particularly where students on account of illness or absence from college have been obliged to make up their laboratory work. It has taken, on the whole, almost as much time for the instructors to help such students to make up their lost work as is spent in regular instruction. We have in part met this trouble by assigning certain days in each month when lost work may be made up.

Attention must be called again to the needs of the library. It is important that we should at once take, and continue to take, the *Archives de Physiologie*, the *Archives italiennes de biologie*, and the *Zeitschrift für Biologie*. We have been put to much inconvenience during the past two years because the recent numbers of these journals were not at hand. It may be added also once more that the entire set of the back numbers of Pflüger's *Archiv* (1868-1885) and the corresponding back num-

bers of the *Archiv für Anatomie und Physiologie*, from 1885 to 1877 or, much better, to about 1860, are most urgently needed to supply the deficiencies of the library and to extend its supply of current physiological literature at the earliest possible moment. The back numbers required will probably never be any cheaper than they are now. Some of them are becoming yearly harder to procure. It is also a source of expense that we do not have at hand the journals, both old and recent, which are needed for our work, but are obliged to consult them elsewhere.

### *Physical Training.*

The report of the director, Dr. Alice Bertha Foster, is published in full as containing a valuable comparison of the results obtained from the use of the German and Swedish systems of exercise.

To the President of Bryn Mawr College,

Madam : The year's work in Physical Training began October 2nd, 1895, with physical examinations which occupied the first five weeks.

As usual, the exercise of the first month consisted of out-door sports, tennis, basket ball, golf, hare and hounds, etc. The interest in bicycling showed a very great increase. Stables have been provided, and nearly one hundred wheels were in use during the autumn. This is very satisfactory, as the exercise has been strongly recommended by the department.

Class work in the gymnasium began in November and ended in April as usual in point of time, but a marked advance has been effected in its method of application.

During the past two years a strong and steady effort has been made to raise the Bryn Mawr gymnasium to the standard recognised as best by the National Association of Leaders in Physical Training. As before reported, during the year, 1894-95, the office methods of record-keeping, tabulation, etc., which were instituted at the founding of the college, were recast according to the newest proved and accepted system. This involved much labor, but has been satisfactorily accomplished, and in the

present year the reform has been carried further into the matter of class grading. The method of classification by "strength-weight index," as presented to the American Association for the Advancement of Physical Education at its Philadelphia meeting in 1892, was applied to the three lower classes, as was also the method of class grading by "total strengths." "Total strength" is the sum of all the strength tests, and is technically called "t. s." The "strength-weight index" is a figure showing the value of "t. s." when modified by its relation to the size of the individual, and is called "s. w. i." Careful comparison was made and the correspondence proved fairly good, but "s. w. i." was decided to be the better basis for class division.

By this test these three classes were separated into "weak" and "strong" divisions, and appropriate class work was given to each. The senior class was not so tested, because it was thought neither necessary nor wise to divide the class. The results of this comparison were interesting and encouraging, as they confirm the wisdom of the system of physical training now followed. Its aim is not to train special athletes, but to raise the physical standard of the mass, to insure that all shall have exercise sufficient for health, to make the weakest gain most, as they need most, and to benefit each student, not the picked students alone.

The use of averages has been discarded, as it is generally recognised that they are practically valueless in this work, and all comparisons are now made by "means."

The "mean t. s." of these classes was found to be as follows :

Freshman, . . . . .	230+ kg.
Sophomore, . . . . .	262+ kg.
Junior, . . . . .	266+ kg.
Senior, . . . . .	273+ kg.

This shows the steady increase from year to year, which proves the value and success of our present method. The element of natural growth is involved in the Freshman year, as shown by large gains in weight and girth of hips, and (usually small) gain in height ; but its absence is proved by the absence of these gains in the upper classes.

It seems well here to define what our plan of work is, and

to add a few words of general explanation. Our gymnasium is, and always has been, conducted on the Sargent System. The basis of the Sargent System is the proposition that each individual should be considered separately, his defects noted, his needs studied, and his possibilities ascertained. His exercises should be directed from this standpoint. In almost every case some form of class work is desirable, and also some personal corrective or developing work. The class work is chosen from one of the two great national gymnastic systems, German or Swedish. The individual work is prescribed to be done chiefly on certain pulley weight machines, almost all of which were devised or adapted by Dr. Sargent himself.

Both German and Swedish class work are taught in the best normal schools of physical training, and both are used in our gymnasium. Broadly, one may say that Swedish free exercise is given to the weaker, and to the more ignorant, for its excellence in discipline, and accuracy in simple movements. German class work is given to the stronger, more skillful, and better trained, as it represents more advanced work in muscle co-ordination, nervous control, and skill and rapidity of action; and gives most ease in handling the body in new situations.

Accordingly, the weaker sections of Freshman and Sophomore classes were given Swedish work; the stronger divisions were put at once on German work. This conclusion, drawn from the "s. w. i." for the Freshman, was at once justified by the comparison of personal histories and vital examinations; since while it appeared that a few on account of organic deficiencies must be relegated to the "weak" division, yet almost all those selected by "s. w. i." for the strong division and the more advanced work had had previous gymnastic training in preparatory schools.

Both divisions of the Juniors were given German work.

The Seniors were not divided, and were all given Swedish work, because being simpler and less a training for nerve-centres it need add nothing appreciable to the nervous effort of the hardest college year, although supplying the hygienic need of tissue waste and heart-stimulant. This is merely a concession to the acknowledged pressure of the Senior year, recognised in other colleges by a remission in gymnastic require-

ments, but that the advance made under this system is inferior is shown by the relation of mean "total strengths" of the four classes compiled from the measurements taken in April and the measurements of the same students in October, 1895.

	October, 1895.	April, 1896.
Freshmen, . . . . .	241.4 kg.	272.1 kg.
Sophomore, . . . . .	258.3 kg.	287.7 kg.
Junior, . . . . .	277.2 kg.	292.5 kg.
Senior, . . . . .	275.0 kg.	287.7 kg.

In October the Juniors, 277.2, and the Seniors, 275, had each had one year of German work after more or less previous Swedish work. In April it will be seen that the Seniors taking Swedish drill only, have but just reached the mean of the Sophomore, while the Juniors, on German work, have surpassed them by a larger margin than in October.

As this sharp division and distinct class work gave unusual opportunity for comparison of these two systems, I spent my Easter recess in tabulating figures from the work of the previous college year, with results worth reporting. It is manifestly unjust to compare Freshmen with Sophomores, or Sophomores with Juniors, in questions of gain, although comparison may more fairly be made in "s. w. i." or "t. s." Entering classes gain most for two reasons. The first is the increment of growth already mentioned; the second, the fact that, having had no training before, they have everything to gain, whereas a pupil after one, two, or three years of training is already much nearer her own maximum. This is clearly illustrated by the mean gains in "t.s." by our four classes during this present year (1895-96).

Freshmen, . . . . .	30.7 kg.
Sophomores, . . . . .	29.4 kg.
Juniors, . . . . .	15.3 kg.
Seniors, . . . . .	12.7 kg.

For questions of gain, thus, my only safe comparison was in an accidental division of my Junior class. The class as a whole had been given German exercises, but a small group had been placed with the Seniors for Swedish drill. From each division, German

and Swedish, I selected the largest gain made by any one student in each item of second measurement. The result was as follows, in the significant items :

	German.	Swedish.
Sitting height, . . . . .	1.6 cm.	1.1 cm.
Girth of neck, . . . . .	1.2 cm.	1.6 cm.
Girth of chest, . . . . .	3.3 cm.	3.0 cm.
Girth of chest, expanded,...	3.1 cm.	2.9 cm.
Girth of lower chest,.....	3.3 cm.	5.3 cm.
Girth of lower chest, exp'd,..	4.1 cm.	3.7 cm.
Girth of waist, . . . . .	4.5 cm.	2.7 cm.
Girth of hips, . . . . .	—3.3 cm.	—2.0 cm.
Girth of arm, right, . . . . .	2.5 cm.	1.5 cm.
Girth of arm, left,.....	2.8 cm.	1.8 cm.
Girth of forearm, right,....	1.8 cm.	1.8 cm.
Girth of forearm, left,.....	1.8 cm.	1.2 cm.
Breadth of shoulders, . . . . .	2.7 cm.	2.1 cm.
Depth of chest, . . . . .	1.7 cm.	1.2 cm.
Capacity of lungs, . . . . .	40 cu. in.	15 cu. in.
Strength of back, . . . . .	37.0 kg.	30.0 kg.
Strength of legs, . . . . .	55.0 kg.	39.0 kg.
Strength of chest, . . . . .	15.8 kg.	10.5 kg.
Strength of forearm, right,..	8.0 kg.	6.0 kg.
Strength of forearm, left,...	10.5 kg.	5.0 kg.

The greater gain on neck girth is typically Swedish and due directly to the form of exercise.

The only other measurement in which a "Swedish" student surpassed the "German" is the "lower chest," and this involves an exceedingly interesting point. In reckoning gains in girths, experience teaches that increase in adipose tissue first appears in hips and thighs. If hips have gained as well as chest and arms, as a rule it indicates that all the gains are due, at least partly, to fat. If chest and arms have gained while hips and thighs have gained little or nothing, or have actually lost, then the gain is counted a matter of muscular or postural improvement, and credited to the exercise. The latter type of changes is the rule during our winter gymnasium season, while the reverse is the

case during the summer, as proved by April and October measurements. This large gain in lower chest was made by No. 278 of the Swedish class : she also gained 7.8 cm. (over three inches) in girth of hips, and  $11\frac{3}{4}$  lbs. in weight, and proportionately in other measurements, showing that this lower chest gain was, like the others, largely adipose. On the other hand, the greatest gain in this item among the "Germans" was by No. 352, who lost  $2\frac{1}{2}$  lbs. in weight, and did not gain in hip girth.

Another piece of evidence appears in the class means in October, 1895, wherein the Juniors, after one year of German work, appear at 5.11 "s. w. i."; the Freshmen, with no previous training for the majority, reach 4.44, while the Sophomores, after one year of Swedish work touch only 4.38.

Another argument appears in comparing the mean gains in total strength in the two divisions of the present Freshman class during this year. The "German" division gained 36. kg., whereas those in the Swedish class gained 25.5 kg., although, as already stated, the "German" students had almost all had some previous gymnasium work, and so had passed the period of initial training, wherein greatest gains are expected.

In measurements, the "Swedish" mean gain in weight was  $7\frac{1}{2}$  lbs. and the "German," 8 lbs., yet the former gained 4.5 cm. in hip girth against 3.9 cm. in the "German" division ; whereas the latter gained 2 cm. in chest girth, and the "Swedish" class only 1.2 cm.

This relation of hip and chest girths is also well illustrated by the other classes, where the "German" division of the Sophomores, the Juniors ("German"), and the Seniors ("Swedish"), all show gain in chest and reduction of hips (the "German" classes gaining also in arm girth) ; while the "Swedish" division of Sophomores gained on chest, arm, and forearm, but increased in hip girth almost as much as in chest, which, as already explained, implies fat.

The division into "strong" and "weak" has proved a good stimulant to ambition, and many have begged for promotion. If that was impossible, permission was sometimes given to take the work of the other division as elective, and the frequency with which this was done has made an appreciable difference in both

grades and final examinations. At the end of the first semester, a few faithful workers were tested and promoted. Let me quote one case. For No. 587 I give the gains made between November 1st, 1895, and February 10th, 1896, 14½ weeks ; also between February 10th, 1896, and April 4th, 7½ weeks.

I regret the absence of "capacity of lungs" throughout this report. It is due to a defective spirometer, which will be at once replaced.

Actual tests,	Nov. 1, 1895.	Feb. 10, 1896.	Apr. 4, 1896.
Strength of back, . . . . .	70.0 kg.	78.0 kg.	82.0 kg.
Strength of legs, . . . . .	78.0 kg.	90.0 kg.	112.0 kg.
Strength of chest, . . . . .	31.0 kg.	34.5 kg.	36.2 kg.
Strength of forearm, rt, . . . . .	24.5 kg.	25.5 kg.	28.0 kg.
Strength of forearm, l't . . . . .	18.0 kg.	18.0 kg.	22.5 kg.

---

Total strength, . . . . . 221.5 kg. 246.0 kg. 280.7 kg.

Amount of gains.	In 14½ weeks.	In 7½ weeks.
Strength of back, . . . . .	8.0 kg.	4.0 kg.
Strength of legs, . . . . .	12.0 kg.	22.0 kg.
Strength of chest, . . . . .	3.5 kg.	1.7 kg.
Strength of forearm, right, . . . . .	1.0 kg.	2.5 kg.
Strength of forearm, left, . . . . .	0.0 kg.	4.5 kg.

---

Total strength, . . . . . 24.5 kg. 34.7 kg.

It appears that, while in two items the gain was half as much in 7½ weeks of German work as in 14½ weeks of Swedish drill, in three of the five it was actually much greater in about half as much time ; and this is conspicuously so in the weak left arm, which had gained nothing during the first three months, and also in "t. s."

The fact remains, however, that Swedish work is excellent for discipline and for erectness in carriage, and therefore it is good in preparatory schools, or wherever dealing with young and growing children.

After April 4th, No. 587 gave herself enthusiastically to basket ball practice, but when her tests were again taken, after some



weeks, she had gained very slightly, and had lost 1.2 kg. on chest strength, illustrating that basket ball practice cannot replace proper gymnasium training, although it has its place and value.

The need for separating the weaker part of the Sophomore class, as well as of the Freshman, is shown by the "t.s." means. In October the "strong" Freshman class showed a mean "t. s." of 266.7 kg., whereas the "weak" Sophomore class reached just 233 kg., and only rose at 266.4 kg. in the April tests; 266.+, however, is the test at which the Freshmen were given German work, and I consider the Sophomores, also, now ready for the more advanced form of exercise.

An informal vote was taken among those ready for the change concerning personal preference, with the result of an almost unanimous choice of German.

The question has sometimes been asked whether our strength tests tell correctly the general power of the student, and I am glad to offer proof that they do. Of the highest fourteen students in the Senior class, as reckoned in October by "t. s.," eight appeared in April in the champion team of the basket-ball tournament, and a ninth was lower in "t. s." only because of small physique, but stood near the head in "s. w. i."

The same team offers a reply to the question of the relation of physical education to studies, since two of these same champions won fellowships as well as athletic laurels.

Another question asked is whether the gains claimed for the gymnasium are not partly due to basket ball. The gains shown in the measurements and strength tests are not, and cannot be, since these are taken before the ball training, athletics following the closing of indoor classes. However, we heartily believe in the physical value of our games, and will credit them with part of the excellent health of our Senior class as a whole. Again, less than half the students engage in basket ball, whereas the class means are drawn from all.

As usual, the gymnasium has been open for floor work from 4 to 6 p.m., and from 8 to 10 p.m. daily, except Saturday, when the building is open to the public. Classes are held in the afternoon, and the evening hours are used for individual practice.

The measurements taken during the year were as follows :

<i>First.</i>	Oct., 1895.		Feb., 1896.		April, 1896.
Freshmen . . . .	66	Freshman . . . .	1		
Hearer . . . . .	1				
Graduates . . . .	20				
	<hr/>				
Total . . . .	87				
<i>Second.</i>					
Sophomores . . . .	49	Sophomores . . . .	2	Freshmen . . . .	64
Juniors . . . . .	54	Junior . . . . .	1	Hearer . . . . .	1
Seniors . . . . .	38	Senior . . . . .	1	Sophomores . . . .	51
Graduates . . . .	3			Juniors . . . . .	46
	<hr/>			Seniors . . . . .	33
				Graduates . . . .	5
	<hr/>				<hr/>
Total . . . .	144	Second . . . .	4	In April . . . .	200
Brought down .	87	Brought down .	1		
	<hr/>		<hr/>		
Total in October .	231	Total in February	5		
Total first measurements . . . . . 88					
Total second measurements . . . . . 348					
Total measurements for the year . . . . . 436					

Of these, all the Freshman and Sophomore measurements, both in October and April, were plotted on the Sargent charts, introduced last year, showing not only the individual's relation to the normal type, but also the relation of her own successive measurements. Thus we can see both the student's needs and the degree of success effected by her exercises. These charts were shown and explained in class hours to the Freshmen, each student studying her own chart, on whose margin was written indications of her worst deficiencies and the special exercises calculated to remove them.

Prescription cards were also given in the autumn, and in the spring an informal examination given to learn the student's memory and faithfulness in regard to the explanations and directions given. More attention will be paid to this next year, and the examination will be more strict and extended to other classes.

The new chart, presented by Dr. Hanna, of Oberlin, in 1895, at the meeting in New York of the American Association for

the Advancement of Physical Education, will be adopted for the entering class in October, representing a higher grade of previous training than the one now in use.

I have just visited the other three leading women's colleges, Wellesley, Vassar, and Smith, and also the Pennsylvania State Normal School, and several other gymnasia of first rank, and have not found our work equaled in this respect.

Wellesley has led the women's colleges in scientific use of measurements, but has temporarily laid the work aside for lack of funds. Bryn Mawr has the advantage, at present, of smaller numbers to handle, and can, therefore, make far better use of the newest advances in the scientific application of exercise than can be done with an overcrowded gymnasium. Our thorough grading of classes and scientific progression of work is another envied privilege made possible by our schedule, which leaves the late afternoon free for physical improvement.

Many friends and strangers have been shown our system, and have evinced most gratifying interest and appreciation of the real worth of physical examinations so handled. On the 15th of February the department entertained about thirty physical educators from Philadelphia and vicinity, invited to discuss the organisation of a local society of the American Association for the Advancement of Physical Education. The society was organised on the spot, and has since been extended to include the state.

Outside the regular class work, lessons have been given to beginners in swimming; and two elective fencing classes were formed by request. They proved too popular for as thorough work as the department wishes, and will be strictly limited in number next year. Very good work was done, however, by some members, for twelve half-hour lessons in a crowded class.

The fire brigades organised last year are in good order, and proved their real value in one incipient fire. In only one hall was it necessary to re-organise in October, the others retaining enough of their old members to initiate the new. The men's brigade has been arranged and tried, and the out-door apparatus renewed and tested.

Work on our new athletic field has gone on steadily, and we

expect to use it in the autumn for bicycling, running, basket ball, and, later, as a skating park.

A letter has been received from the International Y. M. C. A. Training School at Springfield, where basket ball originated, asking our practice and opinion as regards modification of the existing rules, and suggesting a conference of the directors of the women's colleges. I visited the women's colleges largely on this account. I also went to the Springfield School and discussed the matter with its leaders.

I find all the other women's colleges differ from us in the matter of snatching the ball, whereas we play by the rules in use in men's colleges. The question involves a great deal more than appears on the surface. The physical risk is by no means the only consideration. I intend to give a great deal more thought and study to the question, and I hope that our students will do the same. It is not a point to decide hastily or by personal preference. I have asked our captains to study it carefully, and next year I hope that I may be able to treat the whole subject more fully.

This year for the first time each class was represented in the basket ball tournament. Many visitors attended the series, and the excitement and interest increased steadily to the end. The games were :

Freshman-Junior—won by Junior,.....	2
Sophomore-Senior—won by Senior,.....	2
Junior-Senior—won by Junior, .....	1
Junior-Senior—won by Senior, .....	2

“’96,” therefore, as champions of the college have won the exclusive privilege of adorning the gymnasium throughout the coming year with their class colors and numerals.

Respectfully submitted,

ALICE BERTHA FOSTER, M.D.

*Library.*

Two thousand five hundred and ten volumes have been added to the library during the past year, making a total of twenty-four thousand three hundred volumes at present on the shelves.

The growth of the library in the past ten years, as indicated by the figures given in the foot note,\* shows an average rate of increase of about twelve hundred volumes annually during the years from 1885 to 1891. Since 1891, the library has grown more rapidly, the very gratifying increase of the past few years being due largely to the generosity of friends.

The Sauppe library, the gift of Miss Garrett in 1894, is now completely catalogued, with the exception of the dissertations, and accessible to students. During the past year three separate gifts of the total value of two thousand one hundred and fifty dollars, have made it possible to purchase a small but valuable collection of art books and photographs, illustrating the history of art. The sum of nine hundred dollars, obtained from the sale of duplicates in the Sauppe library, became available this year, and was applied to the purchase of sets of journals needed by the departments of mathematics, chemistry, and physics.

About one thousand volumes are purchased annually from the library appropriation. Two hundred periodicals are taken in at an annual cost of nearly one thousand dollars. Indispensable as these periodicals are, they are a heavy drain on the library resources, and each year the departments find themselves more and more restricted in the purchase of books, owing to the necessity of subscribing to an ever increasing number of journals and publications of learned societies.

The cataloguing has progressed satisfactorily during the year. The old shelf list in book-form has been discarded, and new lists

---

* 1885-86, number of volumes in the library,	2,499
1886-87,	4,330
1887-88,	5,246
1888-89,	6,282
1889-90,	7,376
1890-91,	8,721
1891-92,	10,120
1892-93,	12,610
1893-94,	14,301
1894-95,	21,790
1895-96,	24,300

on cards have been substituted. The annual inventory taken during the summer shows as usual that very few books have been lost although the students have access to the shelves.

The following gifts of books, received during the year, are herewith gratefully acknowledged:

Academy of Natural Sciences (Philadelphia): "In Memoriam, John A. Ryder."

Dr. Charles M. Andrews: Cunningham, "English Industrial History."

Dr. Baier: "Bemerkung z. d. strengen und anapaest-system," given by the author.

Miss Emily Greene Balch: "Manual for use in cases of juvenile offenders, and other minors in Massachusetts," given by the author.

Dr. Florence Bascom: Williams, "Geological Biology."

Dr. Hermann Collitz: Lewes, "Goethe's Leben und Werke."

Miss Mary E. Garrett: Jewett, "Betty Leicester's English Christmas"; Dumas, "Impressions de voyage"; Bebel, "Woman in the past, present, and future"; Eliot, "Essays"; Gogol, "Taras Bulba"; Scott, "Historical Documents relating to S. Mark"; Boillo, "Basilica of S. Mark"; Grossi, "Marco Visconti"; Drummond, "Pax vobiscum"; Armstrong and Ludlow, "Hampton and its Students"; Azelio, "Ettore fiermosca"; Manzoni, "I promessi sposi"; Murray, "Handbook of Egypt"; Taine, "Philosophie de l'art en Italie"; Griffis, "Mikado's Empire"; Bird, "Unbeaten tracks in Japan"; Publications of the United States Government, seventy-one volumes; Du Chaillu, "Adventures in Equatorial Africa."

Professor Franklin H. Giddings: "Principles of Sociology," given by the author.

Rev. Smith B. Goodenow: "Bible Chronology."

Harvard Graduate Club: "Graduate Courses," two copies.

Dr. Mary Putnam Jacobi: "Common-sense applied to Woman Suffrage," given by the author.

Mr. Edmund J. James: "Education of business men in Europe," given by the author; also, eight pamphlets on educational and economic subjects.

Mr. Max L. Kellner: "The Prophecies of Isaiah."

Miss E. P. La Selle: "The black Sheep"; "A true Virginian," given by the author.

Dr. Gongalez Lodge: Hayley, "Introduction to the verse of Terence."

Mr. John J. Lytle: "Journal of prison discipline and philanthropy," January, 1894 and 1895.

Miss M. Isabel Mulford: "Agaves of the United States," given by the author.

Pennsylvania Hospital (Philadelphia): Morton, "History of the Pennsylvania Hospital."

Dr. Lydia Rabinovitch: Three pamphlets.

Mr. Azariah S. Root: "Bird Migration at Grinnell, Iowa, and Oberlin, Ohio"; Dickinson, "History of Church Music."

St. Louis Public Library: "Annual Report of the Board of Directors, 1894-'95."

Miss Lilian V. Sampson: "Pennsylvania Geological Survey," Vol. 1-2, 1858; Lyell, "Principles of Geology"; Lyell, "Elements of Geology."

Mr. Thomas H. Speakman: "Divisions in the Society of Friends," given by the author.

University of Pennsylvania: One hundred and ninety-seven dissertations.

In addition to the above-mentioned gifts, the library has received from the United States Government and from different States a large number of publications, including as complete sets as were obtainable of the geological reports of the various states.

From time to time, books, not otherwise obtainable, have been lent to the library through the courtesy of other institutions. To all of these, and especially to the libraries of Harvard College, Johns Hopkins University, Columbia College, and the University of Pennsylvania, very sincere thanks are due.

Respectfully submitted,

HENRIETTA R. PALMER, Librarian.





ANNUAL REPORT  
OF  
THE PRESIDENT  
OF  
BRYN MAWR COLLEGE,  
1896-97.

---

PHILADELPHIA  
ALFRED J. FERRIS, PRINTER, 29 NORTH SEVENTH STREET.  
1898.

## BOARD OF TRUSTEES.

PHILIP C. GARRETT,  
*President.*

HENRY TATNALL,  
*Treasurer.*

EDWARD BETTLE, JR.,  
*Secretary.*

JAMES CAREY THOMAS, Baltimore.	EDWARD BETTLE, JR., Philadelphia.
JOHN B. GARRETT, Rosemont, Pa.	HOWARD COMFORT, Philadelphia.
CHARLES HARTSHORNE, Philadelphia.	JUSTUS C. STRAWBRIDGE, Philadelphia.
DAVID SCULL, Philadelphia.	THOMAS SCATTERGOOD, Philadelphia.
ALBERT K. SMILEY, Lake Mohonk, N. Y.	HENRY TATNALL, Philadelphia.
PHILIP C. GARRETT, Philadelphia.	JAMES WOOD, Mt. Kisco, New York.
ALEXANDER C. WOOD, Cinnaminson, New Jersey.	

## EXECUTIVE COMMITTEE.

HOWARD COMFORT,  
CHARLES HARTSHORNE,

JAMES CAREY THOMAS,  
EDWARD BETTLE, JR.

## COMMITTEE ON BUILDINGS AND GROUNDS.

DAVID SCULL,  
JUSTUS C. STRAWBRIDGE,

THOMAS SCATTERGOOD,  
HENRY TATNALL.

## FINANCE COMMITTEE.

JOHN B. GARRETT,  
JUSTUS C. STRAWBRIDGE.

THOMAS SCATTERGOOD,

## LIBRARY COMMITTEE.

EDWARD BETTLE, JR.,

HOWARD COMFORT,

DAVID SCULL.

## ACADEMIC APPOINTMENTS.

**M. CAREY THOMAS, PH.D., LL.D.,** *President of the College and Professor of English.*

A.B., Cornell University, 1877; studied at the Johns Hopkins University, 1877-78; University of Leipsic, 1879-82; Ph.D., University of Zürich, 1882; Sorbonne, and Collège de France, 1883; Dean of the Faculty of Bryn Mawr College and Professor of English, 1885-94.

**CHARLOTTE ANGAS SCOTT, D.Sc.,** *Professor of Mathematics.*

Lincoln, England. Graduate in Honors, Girton College, University of Cambridge, England, 1880; B.Sc., University of London, 1882; Lecturer on Mathematics in Girton College, 1880-84; lectured in connection with Newnham College, University of Cambridge, England, 1880-83; D.Sc., University of London, 1885.

**EDWARD H. KEISER, PH.D.,** *Professor of Chemistry.*

S.B., Swarthmore College, 1880; Assistant in Chemistry, Swarthmore College, 1880-81; S.M., Swarthmore College, 1881; Fellow in Chemistry, Johns Hopkins University, 1882-84; Ph.D., Johns Hopkins University, 1884; Student at the Royal School of Mines, Freiberg, Saxony, 1884; Assistant in Chemistry, Johns Hopkins University, 1884-85.

**HERMANN COLLITZ, PH.D.,** *Professor of Comparative Philology and German.*

Bleekede, Hanover, Germany. University of Göttingen, 1875-78; University of Berlin, 1878-81; Ph.D., University of Göttingen, 1878; Privatdocent in the University of Halle, 1885-86.

**JAMES HARKNESS, A.M. (Cambridge and London),** *Professor of Mathematics.*

Derby, England. Major Scholar, Trinity College, University of Cambridge, England, 1882; Graduate in Honors (8th Wrangler) in the Cambridge Mathematical Tripos, 1885; Mathematical Exhibitioner, London University Intermediate Arts Examination, 1885; Mathematical Scholar, London University B.A. Examination, 1887.

**HERBERT WEIR SMYTH, PH.D.,** *Professor of Greek.*

A.B., Swarthmore College, 1876, and Harvard University, 1878; University of Leipsic, 1879-81; University of Göttingen, 1881-83; Instructor in Classics and Sanskrit, Williams College, 1883-85; Ph.D., University of Göttingen, 1884; Fellow by Courtesy and Lecturer on Greek, Johns Hopkins University, 1885-87; Reader in Greek Literature, Johns Hopkins University, 1887-88.

**MARY GWINN, PH.D.,** *Professor of English.*

Studied at the University of Leipsic, 1879-82; University of Zürich, 1882; Sorbonne and Collège de France, 1883; Fellow in English, Bryn Mawr College, 1885-87, and Graduate Student, 1887-88; Ph.D., Bryn Mawr College, 1888.

**CHARLES McLEAN ANDREWS, PH.D.,** *Associate Professor of History.*

A.B., Trinity College, 1884; Fellow in Johns Hopkins University, 1888-89; Ph.D., Johns Hopkins University, 1889.

**GONZALEZ LODGE, PH.D.,** *Professor of Latin.*

A.B., Johns Hopkins University, 1883; Graduate Scholar and Fellow, Johns Hopkins University, 1883-86; Ph.D., Johns Hopkins University, 1886; Professor of Greek, Davidson College, 1886-88; American School of Classical Studies, Athens, 1888-89; University of Bonn, 1889.

**GEORGE A. BARTON, PH.D.,** *Associate Professor of Biblical Literature and Semitic Languages.*

A.B., Haverford College, 1882, and A.M., 1885; studied under the direction of the American Institute of Hebrew, 1885-86; Harvard University, 1888-91; Thayer Scholar, Harvard University, 1889-91; A.M., Harvard University, 1890; Ph.D., Harvard University, 1891.

**JOSEPH AUGUSTE FONTAINE, PH.D.,** *Professor of Romance Languages.*

College of Sion, Nancy, France, 1879; Paris, 1880-81; Johns Hopkins University, 1882-86; Ph.D., Johns Hopkins University, 1886; Collège de France, Sorbonne, Ecole des Hautes Etudes, Ecole des Chartes, University of Bonn, 1886-87; Instructor, University of Nebraska, 1887-89; Professor of Modern Languages, University of Mississippi, 1889-91.

**ARTHUR STANLEY MACKENZIE, PH.D.,** *Professor of Physics.*

A.B., Dalhousie University, 1885; Tutor in Mathematics, Dalhousie University, 1887-89; Fellow, Johns Hopkins University, 1890-91; Ph.D., Johns Hopkins University, 1894.

JAMES DOUGLAS BRUCE, PH.D., *Associate Professor of English Philology.*

A.M., University of Virginia, 1883; University of Berlin, 1886-88; University of Strasburg, 1888; Johns Hopkins University, 1889-90; Professor of Modern Languages, Centre College, 1890-91; Ph.D., Johns Hopkins University, 1894.

THOMAS HUNT MORGAN, PH.D., *Professor of Biology.*

B.S., State College, Kentucky, 1887, and M.S., 1888; Graduate Scholar, Johns Hopkins University, 1888-89; Fellow in Biology, Johns Hopkins University, 1889-90; Ph.D., Johns Hopkins University, 1890; Adam T. Bruce Fellow, Johns Hopkins University, 1890-91.

JOSEPH W. WARREN, M.D., *Associate Professor of Physiology.*

A.B., Harvard College, 1871; University of Berlin, 1871-72; University of Leipsic, 1872-73; University of Bonn, 1873-79; M.D., University of Bonn, 1880; Assistant and Instructor in Physiology, Harvard Medical School, 1881-91; Lecturer in Medical Department of the University of the City of New York, 1885-86; Lecturer in Physiology, University of Michigan 1889.

DICKINSON SERGEANT MILLER, PH.D., *Associate in Philosophy.*

University of Pennsylvania, 1885-88; Fellow in Philosophy, Clark University, 1889-90; Morgan Fellow, Harvard University, 1890-91; Walker Fellow, Harvard University, 1891-92; A.B. and A.M., Harvard University, 1892; University of Berlin, 1892-93; Ph.D., University of Halle, 1893.

ELMER P. KOHLER, PH.D., *Associate in Chemistry.*

A.B., Muhlenberg College, 1886, and A.M., 1889; Johns Hopkins University, 1889-91; Fellow in Chemistry, Johns Hopkins University, 1891-92; Ph.D., Johns Hopkins University, 1892.

EDGAR BUCKINGHAM, PH.D., *Associate in Physics and Physical Chemistry.*

A.B., Harvard University, 1887; Assistant in Physics, Harvard University, 1888-89; Assistant in Physics, University of Strasburg, 1889-90; University of Leipsic, 1890-91; Assistant in Physics, Harvard University, 1891-92; Tyndall Scholar of Harvard University, University of Leipsic, 1892-93; Ph.D., University of Leipsic, 1893.

LINDLEY MILLER KEASBEY, PH.D., R.P.D., *Associate Professor of Political Science.*

A.B., Harvard University, 1888; A.M., Columbia College, 1889; Ph.D., Columbia College, 1890; University of Berlin, 1890-91; University of Strasburg, 1891-92; *Rerum Politicarum Doctor*, University of Strasburg, 1892; Assistant in Economics, Columbia College, and Lecturer on Political Science, Barnard College, 1892; Professor of History, Economics and Political Science, State University of Colorado, 1892-94.

MORTIMER LAMSON EARLE, PH.D., *Associate Professor of Greek and Latin.*

A.B., Columbia College, 1886, A.M., 1887, and Ph.D., 1889; American School of Classical Studies, Athens, 1887-88; in charge of excavations at Sicyon, December, 1887, and July and August, 1891; University of Bonn, 1887-88; University of Berlin, 1889; Assistant in Greek, Columbia College, 1886-89; Acting Assistant in Latin, Columbia College, 1886-87; Instructor in Greek, Barnard College, 1889-95; Lecturer in Greek, Columbia College, 1894-95.

ALFRED HODDER, PH.D., *Associate in English Literature.*

Graduate School, Harvard University, 1890-91; Morgan Fellow, Harvard University, 1891-92; University of Freiburg, University of Berlin, 1892-93; Ph.D., Harvard University, 1897.

MAX F. BLAU, PH.D., *Associate in German Literature.*

Goerlitz, Silesia, Germany. University of Leipsic, 1883-90; Ph.D., University of Leipsic, 1888; Teacher of German in the Berlitz School of Languages, Boston, 1891-92; Master of French and German in Thayer Academy, Braintree, Mass., 1892-96.

LOUIS EMIL MENDER, PH.D., *Associate Professor of Romance Philology.*

A.B., Mississippi College, 1888, and A.M., 1890; Professor of Latin and German, Mary Le Grand Institute, Vicksburg, Miss., 1888-90; Fellow in Romance Languages, Johns Hopkins University, 1892-93; Ph.D., Johns Hopkins University, 1893; Instructor in Romance Languages, Johns Hopkins University, 1893-94; Associate in Romance Languages, Johns Hopkins University, 1894-97.

FONGER DE HAAN, PH.D.,\* *Associate in Spanish.*

Leenwarden, Holland. Instructor in Modern Languages, Lehigh University, 1885-91; Fellow in Romance Languages, Johns Hopkins University, 1893-94; Assistant in Romance Languages, Johns Hopkins University, 1893-95; Ph.D., Johns Hopkins University, 1895; Instructor in Romance Languages, Johns Hopkins University, 1895-96; Associate in Romance Languages, Johns Hopkins University, 1896-97.

---

\* Dr. De Haan has been granted leave of absence for one year's residence in Spain, and will return to the college in the year 1898-99.

JAMES H. LEUBA, PH.D.,\* *Associate in Psychology and Pedagogy.*

B.S., Neuchatel, Switzerland, 1886; Ph.D., Ursinus College, 1888; Scholar in Psychology, Clark University, 1892-93; Fellow in Psychology Clark University, 1893-95; Ph.D., Clark University, 1896.

RICHARD NORTON, A.B.,† *Lecturer in the History of Art.*

A.B., Harvard University, 1892; American School of Classical Studies, Athens, 1892-94; University of Munich, 1894-95.

FLORENCE BASCOM, PH.D., *Lecturer in Geology.*

A.B., University of Wisconsin, 1882, B.Sc., 1884, and A.M., 1887; Johns Hopkins University, 1891-93; Ph.D., Johns Hopkins University, 1893; Assistant in Geology and Instructor in Petrography, Ohio State University, 1893-95.

LIGHTNER WITMER, PH.D., *Non-resident Lecturer in Experimental Psychology.*

A.B., University of Pennsylvania, 1888; Graduate Student, University of Pennsylvania, 1888-90; Assistant in Experimental Psychology, University of Pennsylvania, 1890-91; University of Leipsic, 1891-92; Ph.D., University of Leipsic, 1892; Assistant Professor of Experimental Psychology, University of Pennsylvania, 1892-97.

FREDERIC M. PAGE, PH.D., *Non-resident Lecturer in Italian and Spanish.*

Collège Chaptal, Paris; attended Studi Superiori, Florence; Instructor in Languages, University of Virginia, 1880-82; Acting Professor of Modern Languages and Literature, University of the South, 1882-83; Professor of Modern Languages and Literature, University of the South, 1883-91; Reader in Romance Languages, Bryn Mawr College, 1892-95; Ph.D., University of Heidelberg, 1895; Instructor in French, University of Pennsylvania, 1896-97.

ROSE CHAMBERLIN, *Reader in German and French.*

Great Yarmouth, England. Graduate in Honors, Newnham College, University of Cambridge, England, 1886 (Mediaeval and Modern Languages Tripos, First Class).

ABBY KIRK, A.B., *Reader in English.*

A.B., Bryn Mawr College, 1892.

HARRIET RANDOLPH, PH.D., *Demonstrator in Biology and Reader in Botany.*

A.B., Bryn Mawr College, 1889; Fellow in Biology, Bryn Mawr College, 1889-90; University of Zürich, 1890-92; Ph.D., University of Zürich, 1892.

LUCY MARTIN DONNELLY, A.B., *Reader in English.*

A.B., Bryn Mawr College, 1893; University of Oxford, England, and University of Leipsic, 1893-94; Sorbonne, and Collège de France, and University of Leipsic, 1894-95.

HELEN WHITALL THOMAS, A.B., *Reader in English.*

A.B., Bryn Mawr College, 1893; University of Leipsic, 1893-94, Second Semester; Sorbonne, and Collège de France, and University of Leipsic, 1894-95; Bryn Mawr College, 1895-96.

WILMER CAVE FRANCE, PH.D., *Reader in Classical Literature.*

Tysley, Worcestershire, England. Mason's College, Birmingham, England, 1885-87; Girton College, University of Cambridge, England, 1888-92; Classical Tripos, 1892; Ph.D., University of Chicago, 1895; Fellow in Greek, Bryn Mawr College, 1892-93; Fellow in Latin, University of Chicago, 1893-94; Fellow in Greek, University of Chicago, 1894-95; Reader in Greek and Latin, University of Chicago, 1895-96.

LAURETTE EUSTIS POTTS, A.B., *Reader in English.*

A.B., Bryn Mawr College, 1897; Sorbonne and Collège de France, 1896-97.

MARY DELIA HOPKINS, A.M., *Reader in English.*

A.B., and A.M., Bryn Mawr College, 1896; Fellow in English, Bryn Mawr College, 1896-97.

GORDON J. LAING, PH.D., *Reader in Latin.*

A.B., University of Toronto, 1891; Acting Lecturer in Greek and Latin, University of Toronto, 1893-94; Scholar and Fellow in Latin, Johns Hopkins University, 1895-96; Fellow of the American School of Classical Studies in Rome, 1896-97.

---

\*Dr. Leuba has been granted leave of absence for one year's study in Europe; he will offer courses in Psychology, Pedagogy and the History of Education in 1898-99.

† Mr. Norton has been elected Professor of Archaeology in the American School of Classical Studies in Rome for the year 1897-98, and has been granted leave of absence in order to accept this appointment.

ALICE BERTHA FOSTER, M.D., *Director of the Gymnasium.*

Graduate of Dr. Sargent's Training School for Teachers, 1886; M.D., Medical School of University of Buffalo, 1891; Anderson Summer School, Chautauqua, 1892; Studied in Baron Posse's Normal Class in Practice, Boston, and in Harvard Summer School of Physical Education, 1886; Director Buffalo Sanatory Gymnasium of the Women's Educational and Industrial Union, Buffalo, 1886-92; Assistant Teacher, Harvard Summer School of Physical Education, 1889-90; Tutor in Physical Culture (in charge of the Women's Work), University of Chicago, 1892-94.

MARY SHERWOOD, M.D., *Lecturer on Hygiene and Physician of the College.*

A.B., Vassar College, 1883; M.D., University of Zürich, 1890; Lecturer on Pathology at the Woman's Medical College of Philadelphia, 1891-96.

HENRIETTA R. PALMER, A.B.,\* *Librarian.*

School of Library Economy, Columbia College, 1887-89; Acting Librarian, Bryn Mawr College, 1890-91; A.B., Bryn Mawr College, 1893; Associate Librarian, Bryn Mawr College, 1893-95.

JANE BOWNE HAINES, A.M., *Associate Librarian.*

A.B., Bryn Mawr College, 1891, and A.M., 1892; Fellow in History, Bryn Mawr College, 1892-93.

MADELINE VAUGHAN ABBOTT, A.B., *Secretary.*

A.B., Bryn Mawr College, 1893; Secretary to the Dean, Bryn Mawr College, 1893-94.

ISABEL MADDISON, B.Sc., PH.D., *Secretary to the President and Reader in Mathematics.*

B.Sc., University of London, 1893, and Ph.D., Bryn Mawr College, 1896; Graduate Student in Mathematics, Bryn Mawr College, 1892-93, and Fellow in Mathematics, 1893-94; Holder of the Mary E. Garrett European Fellowship and Student in Mathematics, University of Göttingen, 1894-95.

EVELYN WALKER, *Recording Secretary.*

Bryn Mawr College, 1895-96.

FREDERICKA M. KERR, *Bursar.*

---

\*Miss Palmer has been granted leave of absence for the year 1897-98; her place will be taken by Miss Isabel E. Lord, a graduate of the New York State Library School, Albany.

## TWELFTH ANNUAL REPORT.

### *To the Board of Trustees:*

The President of the College respectfully submits the following report for the twelfth academic year, extending from September 1st, 1896, to August 31st, 1897.

It is a matter of great satisfaction to record that during the year the Trustees have completed the organisation of several new departments of instruction, and authorized in the departments already existing a number of important changes which will tend to increase the efficiency of our teaching.

In accordance with the recommendations made in the president's report of 1894-95, an associateship in psychology and pedagogy has been established, and Dr. James H. Leuba appointed to the post. Dr. Leuba was born in Neuchatel, Switzerland, and has received the degree of bachelor of philosophy from Ursinus College and the degree of doctor of philosophy from Clark University. He has been four years connected with Clark University, for two years as fellow, and in the past year as lecturer in psychology, and has shown himself to be an enthusiastic and successful teacher. The Trustees have granted Dr. Leuba leave of absence for one year to study the methods in use in other psychological laboratories, and in the various schools of pedagogy in Jena, Paris and elsewhere. On his return he will organise graduate and undergraduate courses in pedagogy with special reference to training in high school teaching, and will offer in the department of philosophy a continuous course of instruction in experimental psychology. The attention of the Trustees is called to the need of providing during the coming year laboratories for teaching experimental psychology; the

lecture rooms and laboratories of Dalton Hall are already overcrowded and cannot be made use of for this purpose. There will be needed also a liberal appropriation in order to equip this new department with the necessary apparatus. The need of instruction in teaching has been increasingly felt since it was first brought to the attention of the Trustees two years ago. Such instruction, closely connected as it will be at Bryn Mawr with the laboratory study of psychology, will do much to qualify our graduates and graduate students to deal with the educational problems that will confront them as soon as they enter the profession of teaching. During Dr. Leuba's absence Dr. Lightner Witmer, Assistant Professor of Experimental Psychology in the University of Pennsylvania, will continue the course in psychology that he has been giving this year, and will also offer a two hours' elective in pedagogy, Dr. Herman T. Lukens having resigned the non-resident lectureship in this subject.

The creation by the Trustees of an associate professorship in Romance philology and an associateship in Spanish completed the organisation of the Romance Department as outlined in the president's reports of 1894-95 and 1895-96, and will enable the department to offer henceforth in French five hours weekly for beginners, ten hours weekly of group work, three hours of post-major work, and full graduate instruction in Old French philology and in French literature ; also six hours weekly in undergraduate Italian, as well as graduate work in Italian philology and literature, and seven hours weekly in undergraduate Spanish in addition to graduate work in Spanish. It is very gratifying that the Trustees were able to appoint to these newly created chairs two men already well known in their respective fields as scholars and teachers. Dr. Louis Emil Menger, who has accepted the associate pro-



fessorship of Romance philology, received the degree of A.B. and A.M. from Mississippi College, was for two years professor of Latin and German in Mary Le Grand Institute, Mississippi, and in the next two years first fellow in Romance languages and then graduate student in the Johns Hopkins University, where he received the degree of Ph.D. in 1893. He was appointed instructor in Romance languages in the Johns Hopkins University for the year 1893-94, and in the following year was promoted to an associateship in Romance languages, which he has held for the past three years, and has resigned only to accept the offer of the Trustees. He has specialised mainly in Old French philology, but has also taught and given much attention to Italian and will next year organise both the group work in Italian and graduate courses in Romance philology extending through three years.

Dr. Fonger DeHaan, who has been granted leave of absence by the Trustees for a year's residence and study in Spain, resigned an associateship in the Johns Hopkins University to accept the position of Associate in Spanish in Bryn Mawr College. After coming to this country from Leeuwarden, Holland, Dr. DeHaan taught modern languages in Lehigh University, for six years with marked success, and then entered the graduate department of the Johns Hopkins University, receiving the degree of Ph.D. in 1895. He was instructor in Romance languages in that university in 1895-96 and was promoted to an associateship in 1896-97. Dr. DeHaan is well known as a Spanish scholar, and will return in the autumn of 1898 to organise for the first time full graduate and undergraduate work in Spanish. Dr. Frederic M. Page, who has held the post of non-resident lecturer in Italian and Spanish during the past year, was appointed by the Trustees to conduct the classes in Spanish during the year of Dr. DeHaan's absence.

An important step has been taken in the direction of increased efficiency by dividing the teaching of Latin and Greek. Although there has been for many years a professor of Greek and a professor of Latin at the head of the Greek and Latin departments, yet since the opening of the college certain courses in Latin and Greek have been given by the same instructor. Experience has shown however that it is not easy for the instructor to divide his interest equally between the two departments, and there have now been established by the Trustees two readerships, one in Greek and one in Latin, which will be made associateships at an early date. Dr. Wilmer Cave France, a graduate of Girton College, England, and Ph.D. of Chicago University, has been appointed Reader in Greek Literature. After taking the Classical Tripos in the University of Cambridge, she held successively the fellowship in Greek in Bryn Mawr College, a fellowship in Greek and a fellowship in Latin in Chicago University, and finally a readership in Greek and Latin in the same university. Dr. Gordon J. Laing, a graduate of Toronto University and Ph.D. of the Johns Hopkins University, who had held fellowships in Latin both in the Johns Hopkins University and in the American School of Classical Studies in Rome, and had taught successfully for one year in Toronto, has been appointed Reader in Latin.

The mathematical department has been strengthened by the appointment of Dr. Isabel Maddison as Reader in Mathematics. Dr. Maddison has received the degree of B.Sc. from the University of London and that of Ph.D. from Bryn Mawr College; she studied mathematics in the graduate department of Bryn Mawr College for two years, holding successively the resident fellowship in mathema-

tics and the Mary E. Garrett European fellowship, and during her year abroad studied mathematics in the University of Göttingen. In February, 1895, she was appointed Secretary to the President of Bryn Mawr College, a position that she will continue to hold in combination with the readership in mathematics. Her appointment makes it possible to offer in addition to full graduate courses five hours of lectures in post-major mathematics.

A complete list of the appointments, promotions and changes in the academic staff and in the officers of administration will be found in the first appendix to this report.

During the past year the College has supported at the Woods Holl Marine Laboratory an investigating room which was constantly used throughout the summer by advanced students belonging to our biological department. It has continued also its subscription to the American School of Classical Studies at Athens and has joined in the effort made by some other American colleges and universities to open a similar school for classical study in Rome.

In my last report I referred to the important additions to our means of helping poorer students to obtain an education voted by the Trustees during the year, and it is with profound pleasure that I report this year the foundation by the Alumnæ of Bryn Mawr College of two undergraduate scholarships in memory of our late beloved president, Dr. James E. Rhoads, the first president of Bryn Mawr College. The subscription lists were opened immediately after President Rhoads' death, and during the past two and a half years of severe financial depression, the Alumnæ, who are as yet a small body, have raised the sum of \$8,000, which has been handed over to the Trustees.

In recognition of the purpose for which this gift is made, the Trustees have in return agreed to pay \$500 a year for ten years toward the support of these scholarships, and thereafter in perpetuity a sum calculated at a rate of yearly interest to be agreed on later between the Alumnae and the Trustees. In accordance with this agreement, two James E. Rhoads' memorial scholarships, of the value of \$250 each, have been founded by the Alumnae of Bryn Mawr College. The first of these scholarships, the James E. Rhoads' Sophomore Scholarship, is open to those students only who have completed college work amounting to not less than ten, and not more than twenty-two and a half hours (three semesters' work), and have been in attendance upon lectures at Bryn Mawr College not less than one semester. The second of these scholarships, the James E. Rhoads' Junior Scholarship, is open to those students only who have completed college work amounting to not less than twenty, and not more than thirty-seven and a half hours (five semesters' work), and have been in attendance upon lectures at Bryn Mawr College not less than three semesters. To be eligible for either of these two scholarships a student shall have obtained a high degree of excellence in her work, shall express her intention of fulfilling the requirements for the degree of A.B. at Bryn Mawr College, and shall prove her need of financial aid to the satisfaction of the committee appointed to award the scholarships. In case either scholarship is awarded to a non-resident student, its value shall not exceed \$125. The nominating committee consists of the president of the Alumnae Association of Bryn Mawr College and three other members of the Alumnae Association appointed by the executive committee of the Alumnae Association, the President of Bryn Mawr College, and two members of

the Academic Council of the Faculty, appointed annually by that Council.

The Trustees themselves have also presented four more scholarships to the Board of Education of the City of Philadelphia. In 1893 the Trustees presented the first four public school scholarships ; the competition for these scholarships having shown a great and increasing desire on the part of the graduates of the Philadelphia Girls' High School to study in Bryn Mawr College, it has seemed best to the Trustees to double them. There are now open to the graduates of the Philadelphia Girls' High School eight free scholarships in Bryn Mawr College of the value of \$100 each, entitling the holder to free tuition, and renewable for four consecutive years.

The success of the Girls' High School in preparing candidates for our matriculation examination deserves special mention. In 1893, when the Trustees presented the first four free scholarships to the City of Philadelphia, the curriculum of the new Girls' High School was not yet outlined ; in recognition of this gift, the college preparatory course of the High School, the so-called " classical course," was arranged to meet the requirements of Bryn Mawr College in Latin, French and German; and the class that entered four years ago has just completed this course of study, those of its members who wished to continue their studies in Bryn Mawr College taking examinations for matriculation last June. Eight candidates received our certificates of admission, passing without exception with a very high average of grade ; one of them passed with the highest average of grades obtained in these examinations since the numerical records have been kept, and won the competitive matriculation scholarship for the Middle and Southern States of the value of \$200. This result compares most favourably with that of the best private schools

which have been preparing for our examinations for many years, and is the more remarkable when we remember that in the four years of the high school course these pupils not only learned all the necessary Latin, Algebra and Geometry, but began French and German, which they learned to read at sight.

The twenty-ninth annual session of the American Philological Association was held in Taylor Hall, from July 6th to 8th, by invitation of the President and Trustees of Bryn Mawr College and Professor Herbert Weir Smyth, Professor of Greek and Secretary of the Association. Pembroke West, one of the college halls of residence, was thrown open for the accommodation of members and their wives, and meals were served in the large Pembroke dining room. As it was impossible to hold a large reception in the middle of summer, it was arranged instead that the members of the Association should make an excursion by carriage to Valley Forge as the guests of the College.

The most vital interests of Bryn Mawr College, as of all other American institutions of learning, were menaced by the provisions of the proposed new tariff law relating to the importation of foreign books and apparatus, and the faculty appointed a committee to draw up a petition to congress, which was signed, on behalf of the faculty, by the president and secretary of the faculty, and sent first to the members of the Tariff Committee and to the senators and representatives from Pennsylvania, and afterwards to all the members of both houses of congress. This petition will be found in the last appendix to this report. The danger was averted by the emphatic protest of the colleges themselves and of men of enlightened views throughout the country, and the duties in question were not imposed.

The Annual Conferring of Degrees took place on June 3d, the address being delivered by the Hon. Wayne MacVeagh, of Philadelphia. A list of the degrees conferred and of the fellowships and scholarships awarded for the year 1897-98 will be found in the second and third appendices to this report.

A full list of the speakers who have spoken either before the college as a whole, or before any of the various students' clubs or associations, will be found in the fourth appendix.

The autumn and the spring receptions were held for the first time in the Pembrokes, which proved well adapted for the purpose. The spring reception was given in honour of M. and Mme. Brunetière and Mme. Blanc-Bentzon.

The entire number of students enrolled during the year was 289. There were 46 graduate students, including fellows. The number of graduates was nearly 17 per cent. of the whole number of students. Of the undergraduates 239 were candidates for a degree and 4 were hearers. There were 257 students resident in the college halls and 32 non-resident. The 243 undergraduate students enrolled during the past year may be classified according to states and countries as follows:

Maine, 2; New Hampshire, 1; Massachusetts, 26; Rhode Island, 4; Connecticut, 9; New York, 38; New Jersey, 10; Delaware, 3; Pennsylvania, 90; Maryland, 17; District of Columbia, 4; Virginia, 1; Georgia, 1; Kentucky, 3; Tennessee, 1; Ohio, 3; Indiana, 4; Illinois, 6; Iowa, 3; Arizona, 1; California, 2; Missouri, 2; Texas, 1; Nevada, 1; Nebraska, 1; Kansas, 1; Colorado, 1; Utah, 1; Michigan, 3; France, 1; Japan, 2.

The 46 graduate students enrolled during the year may be classified as follows:

Vermont, 1; Massachusetts, 3; New York, 7; Pennsylvania, 13; Maryland, 3; District of Columbia, 1; Virginia, 1; West Virginia, 1; North Carolina, 3; Ohio, 4; Indiana, 2; Illinois, 1; Iowa, 2; Missouri, 1; Canada, 2; England, 1.

The distribution of the students among the several departments was as follows:

Sanskrit and Comparative Philology, 8; Greek, 49; Latin, 100; English Literature, 185; Anglo-Saxon, 9; German, 74; Teutonic Philology, 5; French, 55; Romance Philology, 4; Italian, 14; Spanish, 6; Semitic Languages and Biblical Literature, 13; History, 99; Political Science, 63; Philosophy, 79; History of Education and Pedagogy, 34; History of Art, 64; Mathematics, 33; Physics, 18; Chemistry, 48; Geology, 3; Biology, 60.

In my report of 1894-95 I called the attention of the Trustees to the fact that the college had increased largely in numbers during the past year of severe financial depression, and it is still more noteworthy that, in the two following years during which this depression has persisted, we should have not only held our own but have slightly increased in numbers. In the year before last, 1895-96, there was an increase of fifteen over the number studying here in any previous year, and during last year although the registration list seems to show a decrease of nine students since the previous year this decrease is apparent only; it is due to a change in the method of registration, those persons connected with the college in official capacities who attend college classes being no longer counted among the students. The steady growth in numbers was even less to be expected because the rigid entrance



examination insisted on at Bryn Mawr in lieu of the too commonly accepted school certificate necessarily increases by at least a year the time required for preparation, and thus adds materially to the expense of educating a girl at Bryn Mawr. That parents are willing to undergo this additional expense in years of such monetary uncertainty affords the most satisfactory evidence possible of the high estimate placed on the training given by the College.

Apart from the usual repairs in the college buildings, the only new work undertaken during the year was the remodelling of the president's house, the Deanery, which was altered and practically rebuilt at an expense of \$14,185.79, of which the Trustees voted \$7,841.45 and the President paid \$6,344.34. This house was originally a small eight-roomed frame cottage, and was part of the property purchased for the college by Dr. Taylor. Before the college opened in 1885 some slight improvements were made, costing a few hundred dollars, in order to fit it for the occupation of the then Dean, and it was named "The Deanery." A few years later four rooms were added and the house was considerably enlarged, at a cost of about \$4,000. It has now been entirely rebuilt by Messrs. Cope & Stewardson. A two-story wing containing seven rooms, and a third story over the main portion have been added ; the corridors, stair hall and veranda have been rebuilt; the original clapboarding has been covered with shingles, thus making the house warmer in winter and cooler in summer; and a shingle roof has been substituted for the original tin roof. The architectural effect is excellent and the house is now admirably adapted to its purpose. .

In pursuance of the policy inaugurated two years ago, the summer has been spent in repairing and renovating

the college buildings, the work being so planned that building by building in regular succession, beginning with those that were built earliest, is put in thorough repair. In the spring of each year the Building Committee and the President of the College make a careful tour of inspection, and the work then decided on is carried out during the following summer under the direction of the president's office by a large force of workmen. This plan has proved more satisfactory and much more economical than our former practice of giving out the work by contract. Until 1895 only the necessary daily repairs had been made and no one of our buildings had been systematically renovated. In the summer of 1895, the stonework of Taylor Hall was repointed and the outside woodwork received three coats of paint; the plumbing of Merion Hall was renewed and extensive alterations and improvements were made in Dalton Hall and in the Gymnasium. In the summer of 1896 the outside woodwork of Merion Hall was painted, and one half of the inside woodwork was carefully refinished; the woodwork of the gymnasium, including the roof, was repainted; the basements of Merion Hall were made into bicycle stables; the fourth floor of Dalton Hall was fitted up for Geology; and Gwynfa and Yarrow, two of the houses rented by the college to members of the faculty, were repainted. Last summer the woodwork of Radnor Hall, opened for students in 1887, and of Denbigh Hall, opened in 1891, was completely repainted and the inside woodwork of the window sills was refinished, the woodwork of Dalton Hall, built in 1892, received two coats of paint, the third being deferred on account of the extremely early cold weather until next summer; and Keiserhof, another of the cottages rented to professors, was painted. If the Building Committee should decide during

next summer to refinish the inside shutters and woodwork of Taylor Hall, and the part of the inside woodwork of Merion, unfinished in 1896, it will have required only four summers to renovate all our buildings erected prior to 1894, and the continuance of this policy according to which each building is reached in rotation every second year will enable us in the future to keep all of the college buildings in perfect repair.

During the past summer also the president's house and Yarrow were connected with the Waring system of drainage, and a good deal of work was done on the dam of the athletic field in order to insure its holding water when in the winter the field should be converted into a skating pond.

A gift of over \$500 was expended in digging up and sowing with grass seed the bed of Yarrow Street, a disused public road, which used to run through the college grounds, so as to bring into the college lawn the five and a half acres acquired by the Trustees from the Kennedy estate.

Planting was done around Taylor Hall and Pembroke East in accordance with the plans of our landscape gardeners, Messrs. Olmsted & Olmsted. The attention of the Trustees is called to the great desirability of setting aside from \$300 to \$500 each year for such planting.

The ten years' contract between the Trustees and the Springfield Water Company, guaranteeing a complete system of fire protection, which was referred to in my last report, went into effect last January. The necessary pipes were laid, and additional fire hydrants were put in place during the summer, at a cost of \$1,313.90 which was charged to the account of Principal. In accordance with this contract, the Springfield Water Company laid an eight-inch

main along the Roberts Road and along the Gulph Road to a point between Dalton Hall and Denbigh Hall, where they introduced a six-inch main into the college grounds, and from this point on continued the eight-inch main as a six-inch main to the corner of the Gulph road and Merion Avenue, where it met the ordinary four-inch main of the water company on Merion Avenue. In addition to the six-inch connection spoken of above, feeding three fire hydrants, seven four-inch pipes were run into our grounds at various points, connecting our fire hydrants with the Springfield water mains, and three fire hydrants were erected on the Gulph road and on Merion Avenue. Seventeen  $2\frac{1}{2}$  double nozzle fire hydrants, coupled with Jones' patent snap couplings, are now so placed as to command all our buildings from both the front and back, and for the first time the professors' cottages on College Hill are protected by fire hydrants. A connection has also been made with the pump at the boiler-house, where the pressure on the hydrants is constantly registered; this pressure is recorded by the head engineer and reported to the president's office twice every twenty-four hours. The contract calls for a pressure at all times on all the hydrants of one hundred pounds, which is sufficient to throw from any given hydrant two streams of water over the top of our highest college building, and the Trustees have agreed to pay in return annually the sum of \$500. On January 5th a test was made in the presence of the Building Committee, the President of the College, and the officers of the Springfield Water Company, and two streams were thrown over the clock in the tower of Taylor Hall. Stop valves have been placed on each of the lines leading into the college grounds, and on the eight-inch main just above Radnor Hall, so that in case of failure in the water supply of the

Springfield Water Company the head engineer of the college can close this valve and use our fire pump as effectively as before the new connection was made. It is impossible to overestimate the importance of the system of fire protection thus introduced during the past year. The details given in the President's report of 1894-95 show that in spite of the 66,500 gallons of water stored in the swimming tank, which was added to the reserve during the summer of 1895, we should have been unable to fight a fire for a space of more than four or five hours without exhausting our available water supply ; and it was moreover necessary to run the boilers all summer in order to make the supply available. These changes have also made it possible to use the Springfield water for drinking purposes during the summer, and in the winter also, whenever our own supply proves inadequate, as the pressure constantly on the pipes is sufficient to fill the tanks in all our buildings.

In my last report I referred also to negotiations for an important change in our system of fire insurance which had been begun towards the close of that year. The new arrangement in question necessitated a complete revision of all our outstanding insurances and a reinsurance for amounts based on a fixed percentage of the actual value of buildings and furniture, each building with its contents being insured according to this fixed ratio. As the Trustees have over one million dollars invested in buildings and furniture, the work involved in the determination of the new values, and the necessary correspondence, occupied much of the time of the Chairman of the Building Committee and the President of the College in the early part of the year. There has now been secured in addition to the specific insurances a blanket form of insurance

which shall become applicable only when the specific insurance has been exhausted. On November 12, 1896, all these arrangements were completed, and the new insurances, including the blanket policy, went into effect. This measure is perhaps even more important than the newly introduced system of fire protection. Although our annual payments for insurance are materially increased, we may feel assured that so long as the present method of insurance is continued the future usefulness of the college is independent, so far as human precaution can avail, of the chances of fire. It is a subject for congratulation that our system of protection against fire was considered so excellent that we were able to reinsure our buildings at city rates.

During the past year Mr. Henry Tatnall, the Treasurer of the Board, submitted to the Trustees a complete statement of all the expenditures charged to the account of Principal, including not only the cost of all the buildings and apparatus paid for by the Trustees, but the expenditures made by the Founder for land and buildings before his death. In order to make up this statement the Treasurer and the President of the College compared item by item the books kept at the Girard Life Insurance, Annuity and Trust Company and at the college for the past ten years; and in many cases, where Dr. Taylor's original accounts could not be found, Mr. Addison Hutton, the architect of the earliest college buildings, most kindly consulted his notes of the building contracts he had given out, and furnished the necessary figures to the President. This financial statement was closely connected with the readjustment of the insurances, since without it the data for the specific insurances could not have been obtained. The two

pieces of work together extended over a great part of the academic year, and required such an expenditure of time that the publication of this report has been on that account inevitably delayed.

The attention of the Trustees is especially called to the full information in regard to the working of the college during the past year given in the appendix to this report. The appendix contains the list of reappointments and changes in the instructors and officers for the year 1897-98; a list of the fellowships and scholarships awarded for the year 1897-98; the names of candidates receiving degrees during the year; a list of the speakers who have addressed the college; the gifts made to the college during the year; the titles of the scientific publications of the faculty that have appeared in the past year; a tabular summary of the courses of instruction; a comparative statement of the distribution of students in the various departments of study during the past twelve years; and a brief description of the scholastic work of the past academic year, compiled from the reports prepared by the professors and instructors in the various departments.

M. CAREY THOMAS,

October 8th, 1897.

President.

## *Appendices.*

---

### *I.*

#### *Reappointments and Changes in the Academic Staff and in the Officers of Administration for the Year 1897-98.*

HERMANN COLLITZ, PH.D., promoted to be Professor of Comparative Philology and German.

MARY GWINN, PH.D., promoted to be Professor of English.

ARTHUR STANLEY MACKENZIE, PH.D., promoted to be Professor of Physics.

JAMES DOUGLAS BRUCE, PH.D., promoted to be Associate Professor of English Philology,

LINDLEY MILLER KEASBEY, PH. D., R.P.D., re-appointed Associate Professor of Political Science.

PAUL ELMER MORE, A.M., resignation of the Associateship in Sanskrit and Classical Literature accepted.

LOUIS EMIL MENDER, PH.D., appointed Associate Professor of Romance Philology.

FONGER DE HAAN, PH.D., appointed Associate in Spanish, and granted leave of absence for one year's study in Spain.

JAMES H. LEUBA, PH.D., appointed Associate in Psychology and Pedagogy, and granted leave of absence for one year's study in Europe.

RICHARD NORTON, A.B., re-appointed Lecturer in the History of Art, and granted leave of absence for one year, to accept the Professorship of Archæology in the American School of Classical Studies in Rome.

OLIVER M. JOHNSTON, PH.D., resignation of the Lectureship in French Philology accepted.

HERMAN T. LUKENS, PH.D., resignation of the Non-resident Lectureship in Education accepted.

LIGHTNER WITMER, PH.D., reappointed Non-resident Lecturer in Experimental Psychology.

FREDERIC M. PAGE, PH.D., reappointed Non-resident Lecturer in Italian and Spanish.

ROSE CHAMBERLIN, reappointed Reader in German and French.

ABBY KIRK, A.B., reappointed Reader in English.



HARRIET RANDOLPH, PH.D., reappointed Demonstrator in Biology and Reader in Botany.

FLORENCE V. KEYS, A.B., resignation of the Readership in English accepted.

LUCY MARTIN DONNELLY, A.B., reappointed Reader in English.

HELEN WHITALL THOMAS, A.B., reappointed Reader in English.

WILMER CAVE FRANCE, PH.D., appointed Reader in Classical Literature.

LAURETTE EUSTIS POTTS, A.B., appointed Reader in English.

MARY DELIA HOPKINS, A.B., appointed Reader in English.

GORDON J. LAING, PH.D., appointed Reader in Latin.

ALICE BERTHA FOSTER, M.D., reappointed Director of the Gymnasium.

MARY SHERWOOD, M.D., reappointed Lecturer on Hygiene, and Physician of the College.

HENRIETTA R. PALMER, A.B., reappointed Librarian, and granted leave of absence for one year.

ISABEL ELY LORD, B.L.S., appointed Miss Palmer's substitute for the year 1897-98.

JANE BOWNE HAINES, A.M., reappointed Associate Librarian.

MADELINE VAUGHAN ABBOTT, A.B., reappointed Secretary.

ISABEL MADDISON, B.Sc., PH.D., appointed Reader in Mathematics, and reappointed Secretary to the President.

MARY HARRIS, A.B., resignation of the Recording Secretaryship accepted.

EVELYN WALKER, appointed Recording Secretary.

FREDERIKA M. KERR, reappointed Bursar.

ANNA BELL LAWTHORP, A.B., appointed Assistant Bursar.

MRS. REGINALD CHASE, MISS SOPHIA KIRK, MISS IDA GARBER, MISS MARTHA GIBBONS THOMAS, and MISS MIRIAM M. LOGAN were reappointed to the charge of Radnor Hall, Merion Hall, Pembroke Hall West, Pembroke Hall East, and Denbigh Hall respectively.

## II.

### *Fellowships and Scholarships Conferred for the Year 1897-98.*

MARGARET HAMILTON, . . . . . *Bryn Mawr European Fellow.*  
Fort Wayne, Ind. A.B., Bryn Mawr College, 1897.

EMILIE NORTON MARTIN, . . . . . *Mary E. Garrett European Fellow.*  
Ardmore, Pa. A.B., Bryn Mawr College, 1894. Graduate Student in Mathematics and Physics, Bryn Mawr College, 1894, 1896-97; Teacher of Latin in the Bryn Mawr School, Baltimore, Md., January-June, 1895; Fellow in Mathematics, Bryn Mawr College, 1895-96.

ELLEN ROSE GILES, . . . . . *President's European Fellow.*  
Philadelphia, Pa. Wellesley College, 1892-93; A.B. and A.M., Bryn Mawr College, 1896. Graduate Scholar in Semitic Languages, Bryn Mawr College, 1896-98.

MINNIE BEATRICE REYNOLDS, . . . . . *Fellow in Greek.*  
Upper Lake, Cal. A.B., University of California, 1895, and A.M., 1897. Instructor in Greek and Latin in the High School, Centerville, Cal., 1896-97.

MARIETTA JOSEPHINE EDMAND, . . . . . *Fellow in Latin.*  
Blhe Mounds, Wis. A.B., Central University of Iowa, 1887, and A.M., 1890, and A.B., University of Chicago, 1897. Assistant in Academic Department, Iowa Wesleyan University, 1887-90; Principal of Academic Department, Iowa Wesleyan University, 1890-93; Professor of Latin, Iowa Wesleyan University, 1893-95; Graduate Student in Greek and Latin, University of Chicago, 1895-97.

GEORGIANA GODDARD KING, . . . . . *Fellow in English.*  
Norfolk, Va. A.B., Bryn Mawr College, and George W. Childs Prize Essayist, 1896; A.M., 1897. Fellow in Philosophy, Bryn Mawr College, 1896-97.

EDITH FAHNESTOCK, . . . . . *Fellow in Romance Languages.*  
Harrisburg, Pa. L.B., Western Reserve University, 1894. University of Zürich, 1894-96.

EMILY FOGG, . . . . . *Fellow in History.*  
Chicago, Ill. Wellesley College, 1889-91; A.B., University of Chicago, 1897.

GERTRUDE LONGBOTTOM, . . . . . *Fellow in Mathematics.*  
Louth, Lincolnshire, England. Girton College, University of Cambridge, England, 1893-97; Mathematical Tripos, Part I., 1896, Part II., 1897.

LIZZIE REBECCA LAIRD, . . . . . *Fellow in Physics.*  
Owen Sound, Ont. A.B., University of Toronto, 1896. Teacher in Ontario Ladies' College, 1896-97.

MARY CLOYD BURNLEY, . . . . . *Fellow in Chemistry.*  
Williamsport, Pa. A.B., Woman's College of Baltimore, 1897.

HELEN DEAN KING, . . . . . *Fellow in Biology.*  
Owego, N. Y. A.B., Vassar College, 1892. Graduate Student in Biology, Vassar College, and Assistant in the Biological Laboratory, 1894-95; Graduate Scholar in Biology, Bryn Mawr College, 1895-96; Graduate Student in Biology, Bryn Mawr College, 1896-97.

EMMA LOUISE BERRY, . . . . . *Graduate Scholar in History.*  
Owego, N. Y. A.B., Cornell University, 1890. Teacher of History and Latin in the High School, Plattsburgh, N. Y., 1890-97.

EDITH FRANCES CLAFLIN, . . . . . *Graduate Scholar in Greek and Latin.*  
Quincy, Mass. A.B., Radcliffe College, 1897.

ELLEN ROSE GILES, . . . . . *Graduate Scholar in Semitic Languages.*  
Philadelphia, Pa. Wellesley College, 1892-93; A.B. and A.M., Bryn Mawr College, 1896;  
Graduate Scholar in Semitic Languages, Bryn Mawr College, 1896-97; Holder of the President's Fellowship, Bryn Mawr College, 1897-98.

ANNAH PUTNAM HAZEN, . . . . . *Graduate Scholar in Biology.*  
Olcott, Vt. L.B., Smith College, 1895.

FRANCES LOWATER, . . . . . *Graduate Scholar in Physics.*  
Nottingham, England. University College, Nottingham, 1888-91, 1892-93; Newnham College, University of Cambridge, England, 1891-92. Assistant Demonstrator in Physics, Bryn Mawr College, 1893-96; Fellow in Physics, Bryn Mawr College, 1896-97.

MARGARET BAXTER MACDONALD,  
*Graduate Scholar in Philosophy and Chemistry.*  
Charlottesville, Va. Pennsylvania State College, 1893-95; Student Assistant in Chemical Laboratory, Mt. Holyoke College, 1895-97.

CHARLOTTE SOUTTER MURDOCH, . *Graduate Scholar in English and French.*  
Baltimore, Md. A.B., Woman's College of Baltimore, 1897.

BERTHA RENBAUGH, . *Graduate Scholar in English, History and Philosophy.*  
Bryn Mawr, Pa. A.B., Bryn Mawr College, 1897.

ANNIE HEATH THOMAS, . . . . *Graduate Scholar in Physics and Biology.*  
Philadelphia, Pa. A.B., Bryn Mawr College, 1897.

MARTHA SHOEMAKER, . . . . . *Earlham Graduate Scholar.*  
Fair Haven, Ohio. A.B., Earlham College, 1897.

DEBORAH BERTHA WHITE, . . . . . *Guilford Graduate Scholar.*  
Belvidere, N. C. A.B., Guilford College, 1897.

CARRIE FLORA HASKELL, . . . . . *Penn Graduate Scholar.*  
Oskaloosa, Iowa. A.B., Penn College, 1897.

MARIANNA NICHOLSON BUFFUM, . . . . . *Foundation Scholar.*  
Newport, R. I. Prepared by the Rogers High School, Newport.

SUSAN JANNEY DEWEES, . . . . . *Foundation Scholar.*  
Westtown, Pa. Prepared by the Westtown Boarding School. Foundation Scholar, Bryn Mawr College, 1896-97.

MARY INDA HUSSEY, . . . . . *Foundation Scholar.*  
Richmond, Ind. Ph.B., Earlham College, 1896.

NELLIE ELIZA WOOD, . . . . . *Foundation Scholar.*  
Wichita, Kan. L.B., Earlham College, 1896; A.B., Penn College, 1897.

FLORINA GERTRUDE WORTH, . . . . . *Foundation Scholar.*  
High Point, N. C. A.B., Guilford College, 1896. Graduate Student in English and History of Art, Bryn Mawr College, 1896-97; Foundation Scholar, Bryn Mawr College, Second Semester, 1896-97.

EDITH SOPHIA WRAY, . . . . . *Foundation Scholar.*  
New York City. Prepared by the Westtown Boarding School, Westtown, Pa., and by Oakwood Seminary, Union Springs, N. Y.

HENRIETTA FOSTER THACHER,  
*First New England States Matriculation Scholar.*  
New Haven, Conn. Prepared by the Hillhouse High School, New Haven.

MARY SOUTHGATE, . . . *Second New England States Matriculation Scholar.*  
Plymouth, Mass. Prepared by the Plymouth High School, and by private study.

ANNA ROCHESTER, . *First New York and New Jersey Matriculation Scholar.*  
Englewood, N. J. Prepared by the Dwight School for Girls, Englewood, and by Prof. A. R.  
d'Aymard.

JULIA QUINTA DAVIDSON,  
*Second New York and New Jersey Matriculation Scholar.*  
New York City. Prepared by Dr. J. Sachs's School for Girls, New York City.

ELLEN DEBORAH ELLIS,  
*First Middle and Southern States Matriculation Scholar.*  
Philadelphia, Pa. Prepared by the Girls' High School, Philadelphia.

JEANNIE COLSTON HOWARD,  
*Second Middle and Southern States Matriculation Scholar.*  
Baltimore, Md. Prepared by St. Timothy's School, Catonsville, Md.

ELEANOR RUTH ROCKWOOD, . . *First Western States Matriculation Scholar.*  
Willsburg, Ore. Prepared by the Portland Academy, Portland.

MARGARET ADELAIDE WILSON, *Second Western States Matriculation Scholar.*  
Portland, Ore. Prepared by the Portland Academy, Portland.

LAURA FOWLER, . . . . . *Special Baltimore Matriculation Scholar.*  
Clarksburg, W. Va. Prepared by the Bryn Mawr School, Baltimore.

MARY ELIZABETH MASLAND,  
*Trustees' Philadelphia Girls' High School Scholar.*  
Philadelphia, Pa. Prepared by the Girls' High School, Philadelphia.

EMMA LOUISE MILLER, *Trustees' Philadelphia Girls' High School Scholar.*  
Philadelphia, Pa. Prepared by the Girls' High School, Philadelphia.

BEATRICE MCGEORGE, . . . . *Trustees' Lower Merion High School Scholar.*  
Cynwyd, Pa. Prepared by the Lower Merion High School, Ardmore, Pa.

CORA HARDY, . . . . . *James E. Rhoads Junior Scholar.*  
Birmingham, Ala. Prepared by the Pollock-Stephens Institute, Birmingham, by Prof. J. C.  
DuBose, and by Miss Florence Baldwin's School, Bryn Mawr, Pa.

DOROTHEA FARQUHAR, . . . . . *James E. Rhoads Sophomore Scholar.*  
Detroit, Mich. Prepared by the Detroit High School.

EVELYN HUNT, . . . . . *Anna Powers Memorial Scholar.*  
Philadelphia, Pa. Prepared by the Friends' Central School, Philadelphia. Holder of the  
Anna Powers Memorial Scholarship, 1897-98.

LEONORA WALTON GIBB, . . . . . *New Century Club Scholar.*  
Philadelphia, Pa. Prepared by the Girls' High School, Philadelphia.

ELLEN DEBORAH ELLIS, *Girls' High and Normal School Alumnæ Scholar.*  
Philadelphia, Pa. Prepared by the Girls' High School, Philadelphia.

MARGARET B. G. BLACKWELL, . . . . . *Bryn Mawr School Scholar.*  
Baltimore, Md. Prepared by the Bryn Mawr School, Baltimore.

JENNIE NICHOLSON BROWNE, . . . . . *Bryn Mawr School Scholar.*  
Baltimore, Md. Prepared by the Bryn Mawr School, Baltimore. Holder of Bryn Mawr School  
Scholarship, 1894-98.

MARY NICHOLSON BROWNE, . . . . . *Bryn Mawr School Scholar.*  
Baltimore, Md. Prepared by the Bryn Mawr School, Baltimore. Holder of Bryn Mawr School  
Scholarship, 1895-98.

EDITH CAMPBELL CRANE, . . . . . *Bryn Mawr School Scholar.*  
Baltimore, Md. Prepared by the Bryn Mawr School, Baltimore. Holder of Bryn Mawr School  
Scholarship, 1896-98.

MARIAN MARGARET HICKMAN, . . . . . *Bryn Mawr School Scholar.*  
Baltimore, Md. Prepared by the Bryn Mawr School, Baltimore. Holder of Bryn Mawr School  
Scholarship, 1896-98.

ALICE WATKINS HOOD, . . . . . *Bryn Mawr School Scholar.*  
Baltimore, Md. Prepared by the Bryn Mawr School, Baltimore. Holder of Bryn Mawr School  
Scholarship, 1894-98.

MARY GRACE KILPATRICK, . . . . . *Bryn Mawr School Scholar.*  
Baltimore, Md. Prepared by the Bryn Mawr School, Baltimore. Holder of Bryn Mawr School  
Scholarship, 1896-98.

ETHEL LEVERING, . . . . . *Bryn Mawr School Scholar.*  
Baltimore, Md. Prepared by the Bryn Mawr School, Baltimore. Holder of Bryn Mawr School  
Scholarship, 1895-98.

MARGARETTA LEVERING, . . . . . *Bryn Mawr School Scholar.*  
Baltimore, Md. Prepared by the Bryn Mawr School, Baltimore. Holder of Bryn Mawr School  
Scholarship, 1895-98.

HANNAH TERESA ROWLEY, . . . . . *\*Simon Muhr Scholar.*  
Philadelphia, Pa. Prepared by the Girls' High School, Philadelphia.

CORINNE SICKEL, . . . . . *\*Simon Muhr Scholar.*  
Philadelphia, Pa. Prepared by the Girls' High School, by the Girls' Normal School, and by  
Miss Case and Miss Hallowell's School, Philadelphia.

---

\* These scholarships are awarded by the Board of Directors of City Trusts, Philadelphia, the successful candidates themselves choosing the institution of learning in which the scholarship shall be held.

### III.

#### *Degrees Conferred During the Academic Year 1896-97.*

##### DOCTOR OF PHILOSOPHY.

###### LOUISE SHEFFIELD BROWNELL, of New York City.

A.B., Bryn Mawr College, 1893. Holder of the Bryn Mawr European Fellowship, and student in Greek and English, University of Oxford, England, and University of Leipzig, 1893-94; Graduate Student in Greek and English, Barnard College, 1894-96; Graduate Student in Greek and English, Bryn Mawr College, 1896-97. Subjects: English and Greek. Thesis: Tennyson's Non-Dramatic Blank Verse. The degree of Ph.D. is to take effect only after the thesis shall have been published.

##### MASTER OF ARTS.

###### MARY JEFFERS, of Pennsylvania.

Classical Course, Wellesley College, 1885-86; Bryn Mawr College, 1895; Graduate Student in Latin, Bryn Mawr College, 1895-96. Chief Subject: Latin.

###### GEORGIANA GODDARD KING, of Virginia.

A.B., Bryn Mawr College, 1896; Fellow in Philosophy, Bryn Mawr College, 1896-97. Chief Subjects: Philosophy and English.

###### MARY HELEN RITCHIE, of Pennsylvania.

A.B., Bryn Mawr College, 1896; Graduate Scholar in Greek and Latin, Bryn Mawr College, 1896-97. Chief Subject: Latin.

###### ELIZABETH DAY SEYMOUR, of Connecticut.

A.B., Bryn Mawr College, 1897. Chief Subjects: Greek and Latin.

###### CHARLOTTE DE MACKLOT THOMPSON, of Maryland.

A.B., Bryn Mawr College, 1896; Fellow in Romance Languages, Bryn Mawr College, 1896-97. Chief Subject: Romance Languages.

##### BACHELOR OF ARTS.

###### LOUISE DUDLEY DAVIS, of New Jersey.

Prepared by the Dearborn-Morgan School, Orange, N. J. Group: Chemistry and Biology. The work for this degree was completed in December, 1896.

###### LAURETTE EUSTIS POTTS, of Philadelphia.

Prepared by the Bellefonte Academy, Bellefonte, Pa., and by private study. Group: Latin and English. The work for this degree was completed in November, 1896.

###### GRACE ALBERT, of Philadelphia.

Prepared by Miss E. F. Gordon's School, Philadelphia. Group: Greek and Latin.

###### LYDIA MITCHELL ALBERTSON, of Philadelphia.

Prepared by the Friends' Select School, Philadelphia. Group: Latin and German.

###### CLYDE BARTHOLOMEW, of Pennsylvania.

Prepared by the Wyoming Seminary, Kingston, N. Y. Group: Greek and Latin.

###### EMILY EASTMAN BROWN, of New York.

Prepared by the High School, Binghamton, N. Y. Group: Greek and Latin.

ELEANOR OLIVIA BROWNELL, of New York City.

Prepared by the Brearley School, New York City. Group: Latin and English.

ANNE ELIZABETH MILLER CALDWELL, of Pittsburg.

Prepared by Miss Florence Baldwin's School, Bryn Mawr, Pa. Group: Latin and English.

MARY MORIARTY CAMPBELL, of New Jersey.

Prepared by the Dearborn-Morgan School, Orange, N. J. Group: History and Political Science.

REBEKAH MUNROE CHICKERING, of Massachusetts.

Prepared by the Milton Academy, Milton, Mass. Group: Latin and English.

ALICE LONGFELLOW CILLEY, of New York City.

Prepared by the Brearley School, New York City. Group: History and Political Science.

MASA DOGURA, of Japan.

Prepared by Miss Florence Baldwin's School, Bryn Mawr, Pa., and by Miss Mary E. Stevens' School, Germantown, Philadelphia. Group: History and Political Science.

GRACE ELDER, of Pennsylvania.

Prepared by the Wellesley Preparatory School, Philadelphia, and by private study. Group: Latin and Mathematics.

KATRINA BRANDES ELY, of Bryn Mawr.

Prepared by the Home and Day School, Detroit, Mich., by Miss Florence Baldwin's School, Bryn Mawr, and by private study. Group: History and Political Science.

MARY LOUELLA FAY, of Boston.

Prepared by the Girls' High School, Boston, by Miss H. St. B. Brooks, and by private study. Group: History and Political Science.

SUSAN DAVIS FOLLANSBEE, of Chicago.

Prepared by Miss Florence Baldwin's School, Bryn Mawr, Pa. Group: Latin and German.

MARY GERTRUDE FROST, of Massachusetts.

Prepared by the Waltham New Church School, Waltham, Mass. Group: Mathematics and Physics.

CAROLINE MORRIS GALT, of Illinois.

Prepared by Jennings' Seminary, Aurora, Ill. Group: Greek and Mathematics.

MARY AGNES GLEIM, of Philadelphia.

Prepared by private study. Group: Latin and English.

CORNELIA BONNELL GREENE, of Philadelphia.

Prepared by Miss Mary E. Stevens' School, Germantown, Philadelphia. Group: Chemistry and Biology.

MARGARET HAMILTON, of Indiana.

Prepared by Miss Porter's School, Farmington, Conn., and by private study. Group: Chemistry and Biology.

AGNES HOWSON, of Pennsylvania.

Prepared by the Friends' Central School, Philadelphia. Group: Latin and German.

HELEN STRONG HOYT, of Pennsylvania.

Prepared by private study. Group: Latin and English.

ALICE JONES, of Nevada.

Prepared by private study. Group: Chemistry and Biology.

MARY BROSIUS KIRK, of Pennsylvania.

Prepared by the Martiu Academy, Kennett Square, Pa. Group: Greek and Latin.

CLARA LANDSBERG, of New York.

Prepared by the Cruttenden School, Rochester, N. Y., and by private study. Group: Greek and Latin.

EDITH LAWRENCE, of New York City.

Prepared by private study. Group: History and Political Science.

ANNA BELL LAWTHOR, of Iowa.

Wells College, 1891-92; Prepared by Miss Mary E. Stevens' School, Germantown, Philadelphia. Group: Latin and Mathematics.

AIMEE GILBERT LEFFINGWELL, of Maine.

Prepared by Miss Florence Baldwin's School, Bryn Mawr, Pa. Group: Latin and German.

MARY ARMSTRONG LEVERING, of Baltimore.

Prepared by the Bryn Mawr School, Baltimore. Group: History and Political Science.

EUPHEMIA MARY MANN, of Philadelphia.

Prepared by Miss F. M. Schleigh's School, Philadelphia, and by private study. Group: Latin and Greek.

MILDRED MINTURN, of New York City.

Prepared by the Brearley School, New York City. Group: History and Political Science.

MARGARET PARSONS NICHOLS, of New York City.

Prepared by the High School, Binghamton, N. Y. Group: English and German.

ELIZABETH NORCROSS, of Pennsylvania.

Prepared by the Metzger Institute, Carlisle, by Fräulein Theilen, Leipsic, Germany, and by Miss Mary E. Stevens' School, Germantown, Philadelphia. Group: English and German.

MARY PECKHAM, of New Jersey.

Prepared by the Misses Vail and Dean's School, Elizabeth, N. J., and by the Plainfield Seminary, Plainfield, N. J. Group: English and German.

ANNA MARIA WHITAKER PENNYPACKER, of Philadelphia.

Prepared by the Friends' Central School, Philadelphia. Group: Latin and German.

ELIZA BROOMALL PENNYPACKER, of Philadelphia.

Prepared by the Friends' Central School, Philadelphia. Group: History and Political Science.

BERTHA REMBAUGH, of Bryn Mawr.

Prepared by Miss F. M. Schleigh's School, Philadelphia, and by private study. Group: Latin and English.

HELEN MATHEWSON SAUNDERS, of New York.

Prepared by the High School, Yonkers, N. Y. Group: German and French.

ELIZABETH DAY SEYMOUR, of Connecticut.

Prepared by the Hillhouse High School, New Haven, Conn., and by private study. Group: Greek and Latin.

ELSIE CAMPBELL SINCLAIR, of Iowa.

Prepared by Miss Gordon's School, Philadelphia. Group: History and Political Science.

MARION RUSSELL TABER, of New York City.

Prepared by the Brearley School, New York City. Group: History and Political Science.

ANNIE HEATH THOMAS, of Philadelphia.

Prepared by the Girls' Normal School, Philadelphia, by Miss Mary E. Stevens' School, Germantown, Philadelphia, and by private study. Group: Chemistry and Biology.



HELEN ELIZABETH TURNBRIDGE, of New York.

Prepared by Mrs. Piatt's School, Utica, N. Y. Group: History and Political Science.

CLARA WARREN VAIL, of New York City.

Prepared by the Brearley School, New York City. Group: History and Political Science.

ANNA MARION WHITEHEAD, of New Jersey.

Prepared by the State Model School, Trenton, N. J. Group: Latin and Mathematics.

#### IV.

#### *Addresses Delivered in the Year 1896-97.*

##### *Before the College :*

PROFESSOR WILHELM DÖRPFELD, "Excavations."

THE REV. DR. JOHN WATSON, "Scottish Traits."

MRS. RUTH McENERY STUART, a reading from her own works.

MR. GRAHAM WALLAS, "Representative Government."

M. FERDINAND BRUNETIÈRE, three lectures on "Corneille ;" "Racine ;"  
and the "Decadence of French Tragedy in the Eighteenth Century."

##### *Before the College, at the fortnightly religious meetings :*

THE REV. DR. LYMAN ABBOTT.

THE REV. DR. ROBERT ELLIS THOMPSON.

THE REV. DR. JOHN SPARHAWK JONES.

THE REV. DR. EDWARD CALDWELL MOORE.

THE REV. DR. CHARLES WOOD.

DR. GEORGE A. BARTON.

##### *Before the Graduate Club :*

THE HON. BERTRAND RUSSELL, "Socialism as the Consummation of Individual Liberty."

MR. TALCOTT WILLIAMS, "A Journalist's Impressions of the Last Presidential Campaign."

PROFESSOR W. S. PHELPS, "The Modern Novel."

MR. RICHARD NORTON, "The Study of Art in American Universities."

SIR ARCHIBALD GEIKIE, "The Geology of the West Coast of Scotland."

##### *Before the Philosophical Club :*

THE HON. BERTRAND RUSSELL repeated his address on "Socialism as the Consummation of Individual Liberty."

MR. WILLIAM ROMAINE NEWBOLD, "The Significance of the Psychological Research Movement."

DR. CHARLES M. BLAKEWELL, "The Philosophical Conception of the Universe."

MR. F.C.S. SCHILLER, "The Ethical Value of a Belief in Immortality."

MR. HENRY RUTGERS MARSHALL, "Realism in Art."

MR. PAUL ELMER MORE, "A Brahmin of the Fifth Century."

##### *Before the Philosophical and Mathematical Departments :*

THE HON. BERTRAND RUSSELL, a course of six lectures on "The Foundations of Geometry."

*Before the Mathematical Department :*

MR. CHARLES E. PEIRCE, "Number : A Study of the Methods of Exact Philosophical Thought."

*Before the De Rebus Club :*

THE HON. MRS. BERTRAND RUSSELL, "A Century of Suffrage."

MR. W. L. SHELDON, "George Eliot."

MR. HILAIRE BELLOC, five lectures on "St. Louis;" "Bayard;" "Rousseau;" "Napoleon;" and "Gambetta."

*Before the College Settlement Association :*

MISS ISABEL EATON, "College Settlement Work."

*Before the Christian Union Association :*

MR. GEORGE J. PURVES, "Bible Study."

THE REV. CHARLES WOOD, an informal address.

PRESIDENT FRISSELL, of the Hampton Institute, an informal address.

MISS K. E. PRICE, an informal talk on "Obedience."

*Before the Temperance Association :*

THE HON. MRS. BERTRAND RUSSELL, "The Recent Temperance Movement in Great Britain."

*Before the Missionary Association :*

MR. T. C. WALKER, of Hampton, and MR. W. B. WEAVER, of the Gloucester Industrial School, addresses in regard to their work.

V.

*Gifts received by the College during the Year 1896-97.*

The following gifts have been received during the past year, in addition to the gifts of special books to the library, which are enumerated and acknowledged in the report of the librarian. Our sincere gratitude is due for these gifts.

From the Treasurer of Bryn Mawr School, for Scholarships . . . . .	\$3200.00
From Miss Ethel Powers, for Anna Powers Memorial Scholarship . . . . .	200.00
From Miss Halliwell, Treasurer of Normal School Alumnæ Association, for the Normal School Alumnæ Scholarship . . . . .	100.00
From the Undergraduates' Students' Association for completion of Athletic Field . . . . .	38.45
From Miss Garrett, for same purpose . . . . .	556.70
From Mr. Justus C. Strawbridge, for gate at Pembroke entrance . . . . .	772.00
From Mr. Justus C. Strawbridge, for grading . . . . .	60.00
From the Hon. Wayne MacVeagh, for roads . . . . .	100.00
From Mr. J. G. Rosengarten, subscription to "Revue des Deux Mondes," and purchase of M. Brunetière's works . . . . .	25.00
From the Hon. Mrs. Bertrand Russell, set of old engravings and prints and framing of same.	
From Miss Garrett, for purchase of books for library . .	1000.00
From "a Friend," for the same purpose . . . . .	371.18
From Miss Lilian V. Sampson, for the biological department, a spectroscopic eye-piece (microspectroscope) of the Abbe model made by Zeiss.	
From the Hon. John P. Jones, of Gold Hill, Nevada, for the geological department, 15 mineral specimens, among them some valuable gold ores.	

system and sense organs.” (With Dr. A. Ferree Witmer.)

“Course 2: Perception. A manual of experiments illustrating some important facts and principles of psychology.” “Course 3: Child Psychology—Psychogenesis—A manual of methods and results in the study of mental development.”

“An attempt at an Experimental Analysis of the Correlation of Certain Mental and Physical Characteristics.” Read before the American Association for the Advancement of Science, Detroit, August, 1897; and before the British Association for the Advancement of Science, Toronto, August, 1897.

“The Psychophysiological Problem of Pain.” Read before the British Association for the Advancement of Science, Toronto, August, 1897.

## VII.

*Tabular Statement of the Courses of Instruction given in 1896-97.*

DEPARTMENT	COURSE	INSTRUCTOR	HOURS WEEKLY	NO. IN CLASS	
				1ST SEM.	2ND SEM.
SANSKRIT AND COMPARATIVE PHILOLOGY .	<i>Graduate Classes</i>				
	Lectures on Comparative Philology	Dr. Collitz	. 1 .	. 5 .	. 5 .
	Sanskrit, beginners . . . . .	P. E. More	. 1 .	. 2 .	. 2 .
GREEK . . . .	Sanskrit, advanced . . . . .	"	. 1 .	. 1 .	. 1 .
	Elementary Greek, Grammar, Com- position, Xenophon's Anabasis, Books I.-II., Xenophon's Hellenica, Books I.-II., Homer's Iliad, Books I.-III. . . . .	Dr. Earle	. 5 .	. 7 .	. 5 .
	Homer's Odyssey, Selections from Books I.-XII, minor . . . . .	P. E. More	. 2 .	. 16 .	. 17 .
	Plato, minor . . . . .	Dr. Earle	. 2 .	. 13 .	. . . .
	Euripides, minor . . . . .	"	. 2 .	. . . .	. 14 .
	Greek Prose Composition, minor .	"	. 1 .	. 13 .	. 13 .
	Lectures on the History of Greek Literature, Epic and Lyric, major	P. E. More	. 2 .	. 11 .	. . . .
	Lectures on History of Greek Liter- ature, Drama and Prose, major .	"	. 2 .	. . . .	. 10 .
	Sophocles, major . . . . .	Dr. Earle	. 3 .	. 11 .	. . . .
	Herodotus, major . . . . .	"	. 3 .	. . . .	. 11 .
	Æschylus, post-major . . . . .	Dr. Smyth	. 2 .	. 10 .	. . . .
	Theocritus, post-major . . . . .	"	. 2 .	. . . .	. 8 .
	Aristophanes, post-major . . . . .	P. E. More	. 2 .	. 3 .	. . . .
	Aristotle, post-major . . . . .	"	. 2 .	. . . .	. 4 .
	<i>Graduate Classes</i>				
	Lyric Poetry . . . . .	Dr. Smyth	. 4 .	. 4 .	. 4 .
LATIN . . . .	Horace, minor . . . . .	P. E. More	. 2 .	. 54 .	. 47 .
	Livy, minor . . . . .	Dr. Lodge	. 2 .	. 50 .	. . . .
	Cicero, minor . . . . .	"	. 2 .	. . . .	. 47 .
	Latin Prose Composition, minor .	"	. 1 .	. 53 .	. 49 .
	Lectures on the History of Latin Literature, major . . . . .	P. E. More	. 2 .	. 20 .	. 21 .
	Tacitus, major . . . . .	Dr. Lodge	. 3 .	. 23 .	. . . .
	Horace, Juvenal, Tibullus, Proper- tius, major . . . . .	"	. 3 .	. . . .	. 25 .
	Plautus, post-major . . . . .	"	. 2 .	. . . .	. 15 .
	Cicero, post-major . . . . .	Dr. Earle	. 2 .	. 13 .	. . . .
	Terence, post-major . . . . .	"	. 2 .	. . . .	. 8 .
	Latin Prose Composition, post-major	"	. 1 .	. 7 .	. . . .
	<i>Graduate Classes</i>				
ENGLISH . . .	Roman Epistolography . . . . .	Dr. Lodge	. 3 .	. 3 .	. 3 .
	Latin Grammar . . . . .	"	. 1 .	. 3 .	. 3 .
	Lectures on the History of English Literature, from the time of Shake- speare to the Restoration inclusive, required . . . . .	Dr. Thomas and A. Kirk	. 3 .	. 113 .	. . . .
	Lectures on the History of English Literature from the Restoration to the present time, required . . . .	Dr. Thomas and A. Kirk	. 3 .	. . . .	. 119 .
	Essay Work, required, first year .	Dr. Gwinn, F. Keys, L. M. Donnelly and H. W. Thomas	. 2 .	. 56 .	. 55 .

*Tabular Statement of the Courses of Instruction given in 1896-97,  
continued.*

DEPARTMENT	COURSE	INSTRUCTOR	HOURS WEEKLY	NO. IN CLASS	
				1ST SEM.	2ND SEM.
ENGLISH . . . (continued)	Essay Work, required, second year	Dr. Gwinn, A. Kirk and H. W. Thomas	. 2 .	. 57 .	. 47 .
	Bright's Introduction to Anglo-Saxon Grammar and Bright's Reader, minor . . . . .	Dr. Bruce	. 5 .	. 4 .	. . . .
	Anglo-Saxon, Beowulf, and Chaucer, minor . . . . .	"	. 5 .	. . . .	. 3 .
	Middle English Grammar and Reading of Middle English Texts, major	"	. 3 .	. 2 .	. 2 .
	English Poets of the Nineteenth Century, major . . . . .	A. Hodder.	. 2 .	. 19 .	. 19 .
	English Critics of the Nineteenth Century, major . . . . .	Dr. Gwinn	. 3 .	. 25 .	. 24 .
	<i>Graduate Classes</i>				
	Seventeenth Century Prose Writers	"	. 2 .	. 7 .	. 4 .
	English Drama . . . . .	A. Hodder	. 3 .	. 4 .	. 4 .
	Development of the Modern English Novel . . . . .	"	. 3 .	. 4 .	. 3 .
	Middle English Romances . . . . .	Dr. Bruce	. 2 .	. 4 .	. 3 .
	Middle English Phonology . . . . .	"	. 2 .	. 1 .	. . . .
GERMAN . . .	Elementary German, Grammar and Translation . . . . .	R. Chamberlin	. 5 .	. 8 .	. 8 .
	Lectures on the History of German Literature from Klopstock to the present time, minor . . . . .	Dr. Collitz	. 2 .	. 22 .	. 25 .
	German Reading, selected, minor .	"	. 1 .	. 19 .	. 24 .
	German Reading, Faust, Part I., minor . . . . .	Dr. Blau	. 1 .	. 27 .	. 26 .
	German Prose Composition, minor	"	. 1 .	. 27 .	. 27 .
	German Conversation, minor and major . . . . .	R. Chamberlin	. 1 .	. 5 .	. 14 .
	Lectures on the History of German Literature from the earliest times to the time of Klopstock, exclusive, major . . . . .	Dr. Blau	. 2 .	. 14 .	. 14 .
	German Reading, selected, major .	"	. 1 .	. 14 .	. 14 .
	German Reading, Faust, Part II., major . . . . .	Dr. Collitz	. 1 .	. 11 .	. 11 .
	German Prose Composition, major	Dr. Blau	. 1 .	. 13 .	. 12 .
	Contemporary German Literature, post-major . . . . .	"	. 2 .	. 2 .	. 2 .
	German Syntax, Advanced Reading and Composition, post-major .	R. Chamberlin	. 2 .	. 5 .	. 4 .
	<i>Graduate Classes</i>				
TEUTONIC PHILOLOGY .	Gothic . . . . .	Dr. Collitz	. 2 .	. 3 .	. 2 .
	Middle High German . . . . .	Dr. Blau	. 2 .	. 3 .	. 3 .
	Old Norse . . . . .	Dr. Collitz	. 1 .	. . . .	. 2 .
	Teutonic Seminary . . . . .	"	. 2 .	. 1 .	. 1 .
FRENCH . . . .	Elementary French, Grammar and Translation . . . . .	R. Chamberlin	. 5 .	. 5 .	. 7 .

*Tabular Statement of the Courses of Instruction given in 1896-97,  
continued.*

DEPARTMENT	COURSE	INSTRUCTOR	HOURS WEEKLY	NO. IN CLASS	
				1ST SEM.	2ND SEM.
FRENCH . . . (continued)	Lectures on the History of French Literature of the Eighteenth and Nineteenth Centuries, minor . .	Dr. Fontaine	. 2 .	. 17 .	. 16 .
	French Critical Reading, minor . .	Dr. Johnston	. 1 .	. 20 .	. 18 .
	French Prose Composition, minor .	"	. 1 .	. 19 .	. 17 .
	French Reading and Conversation, minor . . . . .	"	. 1 .	. 20 .	. 18 .
	Lectures on French Literature of the Sixteenth and the Seventeenth Centuries, major . . . . .	Dr. Fontaine	. 2 .	. 11 .	. . . .
	Lectures on French Literature, from 1850 to the present time, major . .	"	. 2 .	. . . .	. 12 .
	French Critical Reading, major . .	"	. 1 .	. 10 .	. 10 .
	French Prose Composition, major .	"	. 1 .	. 9 .	. 9 .
	French Conversation, major . . .	"	. 1 .	. 7 .	. 8 .
	Old French Reading, post-major . .	Dr. Johnston	. 2 .	. 1 .	. 1 .
	<i>Graduate Classes</i>				
	French Novelists of the Nineteenth Century . . . . .	Dr. Fontaine	. 1 .	. 4 .	. 3 .
	Historical French Grammar . . . .	"	. 1 .	. 1 .	. 1 .
	French Composition and Essay Work, advanced . . . . .	"	. 1 .	. 2 .	. 2 .
	Old French Philology . . . . .	Dr. Johnston	. 3 .	. 3 .	. 3 .
	Old French Reading . . . . .	"	. 2 .	. 2 .	. 2 .
ITALIAN . . .	Italian Grammar, Composition and Critical Reading, minor . . . . .	F. M. Page	. 3 .	. 8 .	. 8 .
	Italian Literature, Grammar, Composition, and Critical Reading, major . . . . .	"	. 3 .	. 2 .	. 1 .
SPANISH .	Spanish Grammar, Composition and Critical Reading, minor . .	"	. 2 .	. 4 .	. 4 .
SEMITIC LANGUAGES AND BIBLICAL LITERATURE	Spanish Literature, Grammar, Composition and Critical Reading, major . . . . .	"	. 2 .	. 1 .	. 1 .
	Elementary Hebrew . . . . .	Dr. Barton	. 2 .	. 1 .	. 1 .
	Assyrian Seminary . . . . .	"	. 2 .	. 1 .	. 1 .
	Arabic Advanced . . . . .	"	. 2 .	. 1 .	. 1 .
	History of the Arabic Caliphates and Civilization . . . . .	"	. 1 .	. 2 .	. 2 .
	Biblical Poetry . . . . .	"	. 1 .	. 7 .	. . . .
	Pentateuchal Criticism . . . . .	"	. 1 .	. . . .	. 3 .
	Old Testament Prophets . . . . .	"	. 1 .	. 4 .	. 6 .
	Advanced New Testament Criticism	"	. 1 .	. 2 .	. 2 .
HISTORY . .	Modern History, from the Treaty of Westphalia to the close of the Napoleonic Campaigns, minor and major . . . . .	Dr. Andrews	. 5 .	. 75 .	. . . .
	Modern History, from the Congress of Vienna to the present time, minor and major . . . . .	"	. 5 .	. . . .	. 85 .



*Tabular Statement of the Courses of Instruction given in 1896-97,  
continued.*

DEPARTMENT	COURSE	INSTRUCTOR	HOURS WEEKLY	NO. IN CLASS	
				1ST SEM.	2ND SEM.
HISTORY . . . (continued)	English Constitutional History, post-major . . . . .	Dr. Andrews	. 2 .	. 5 .	. 5 .
	<i>Graduate Classes</i>				
	Historical Definition, Method, and Criticism . . . . .	"	. 2 .	. 4 .	. . . .
POLITICAL SCIENCE . .	History of the Roman Law . . . .	"	. 2 .	. . .	. 5 .
	History of the Community . . . .	"	. 1 .	. 2 .	. 2 .
	Economic Geography and Demography, minor and major . . . .	"	. 5 .	. 49 .	. 48 .
	Descriptive Sociology, post-major . . . .	"	. 3 .	. 8 .	. 8 .
	Theoretical Sociology, post-major . . . .	"	. 2 .	. 9 .	. 8 .
PHILOSOPHY .	Psychology, Logic, History of Philosophy and Ethics, required . . . .	Drs. Miller and Barton	. 4 .	. 51 .	. 50 .
	Lectures on the Origin and Contents of the Books of the Bible, required . . . .	Dr. Barton	. 1 .	. 49 .	. 47 .
	German Idealism, minor . . . . .	Dr. Miller	. 3 .	. 11 .	. 6 .
	Physiological and Experimental Psychology, minor . . . . .	Dr. Witmer	. 2 .	. 9 .	. 9 .
	<i>Graduate Classes</i>				
	German Idealism, advanced . . . . .	Dr. Miller	. 2 .	. 2 .	. 2 .
	History of Education . . . . .	Dr. Lukens	. 1 .	. 13 .	. 8 .
	PEDAGOGY . . Pedagogy . . . . .	"	. 1 .	. 21 .	. 15 .
	ART AND ARCHÆOLOGY . . History of Greek Art . . . . .	R. Norton	. 2 .	. 11 .	. 13 .
	History of Italian Art . . . . .	"	. 2 .	. 31 .	. 53 .
MATHEMATICS	History of Italian Art, advanced . . . .	"	. 2 .	. 2 .	. . . .
	Trigonometry, required . . . . .	J. Harkness	. 3 .	. 8 .	. . . .
	Trigonometry, required . . . . .	Dr. Maddison	. 3 .	. . . .	. 2 .
	Solid Geometry, required . . . . .	"	. 2 .	. 3 .	. . . .
	Geometrical Conics, required . . . . .	Dr. Scott	. 2 .	. . . .	. 6 .
	Analytical Conics, minor . . . . .	"	. 5 .	. 9 .	. . . .
	Algebra, Advanced Trigonometry, and Theory of Equations, and Elementary Differential and Integral Calculus, minor . . . . .	J. Harkness	. 5 .	. . . .	. 11 .
	Differential and Integral Calculus, Differential Equations, major . . . .	"	. 5 .	. 4 .	. . . .
	Curve Tracing, Analytical Geometry of Three Dimensions, major . . . .	Dr. Scott	. 4 .	. . . .	. 2 .
	History of Mathematics, major . . . .	"	. 1 .	. . . .	. 2 .
	Theory of Higher Plane Curves, post-major . . . . .	"	. 2 .	. 2 .	. 2 .
	Theory of Groups, post-major . . . .	J. Harkness	. 2 .	. 3 .	. 3 .
	<i>Graduate Classes</i>				
	Geometry on a Plane Algebraic Curve . . . .	Dr. Scott	. 2 .	. 3 .	. 3 .
	Elliptic Functions, . . . . .	J. Harkness	. 2 .	. 2 .	. 2 .
	Journal Club . . . . .	Dr. Scott and J. Harkness	1 hour f'tnightly	. 4 .	. 4 .
PHYSICS . . . .	Laws and Properties of Matter and Heat, minor . . . . .	Drs. Mackenzie and Buckingham	. 5 .	. 9 .	. . . .
	Electricity and Magnetism, Light and Sound, minor . . . . .	"	. 5 .	. . . .	. 10 .

*Tabular Statement of the Courses of Instruction given in 1896-97,  
continued.*

DEPARTMENT	COURSE	INSTRUCTOR	HOURS WEEKLY	NO. IN CLASS	
				1ST SEM.	2ND SEM.
PHYSICS . . . . (continued)	Laboratory Work, minor . . . . .	Drs Mackenzie and Buckingham	4	10	10
	Theory of Heat, Problems in Mechanics, major . . . . .	"	5	3	
	Theory of Electricity, Theory of Light, major . . . . .	"	5	3	3
	Laboratory Work, major . . . . .	"	5	4	3
	Mechanics, post-major . . . . .	Dr. Buckingham	2		2
	<i>Graduate Classes</i>				
	Theory of Sound, . . . . .	Dr. Mackenzie	3	1	1
	Heat Conduction . . . . .	"	2	2	2
	Thermodynamics . . . . .	Dr. Buckingham	2	3	
	Laboratory Work, . . . . .	Drs. Mackenzie and Buckingham		1	2
	Journal Club and Seminary . . . .	"	1	2	2
CHEMISTRY . .	Introduction to General Chemistry minor . . . . .	Dr. Keiser	3	28	
	General Chemistry, minor . . . . .	"	3		27
	Chemical Physics, minor . . . . .	Dr. Kohler	2	28	26
	Laboratory Work, minor . . . . .	Drs. Keiser and Kohler	5½	28	26
	Organic Chemistry, major . . . . .	Dr. Keiser	2	9	10
	Theoretical Chemistry, major . . .	Dr Kohler	1	9	10
	Inorganic Chemistry, major . . . .	"	2	9	10
	Inorganic Chemistry and Quantitative Analysis, major . . . . .	"	3		10
	Laboratory Work, major . . . . .	Drs. Keiser and Kohler	5½	9	10
	Advanced Organic Chemistry, post-major and graduate . . . . .	Dr. Kohler	1	8	8
	Thermo-Chemistry, post-major and graduate . . . . .	Dr. Keiser	1	8	8
	Laboratory Work, post-major and graduate . . . . .	Drs. Keiser and Kohler	15	8	8
	Journal Club and Seminary Work	"	1	8	8
GEOLOGY . . .	General Geology . . . . .	Dr. Bascom	3	3	1
	Laboratory Work . . . . .	"	2	3	1
	Field Work . . . . .	"	2½	3	1
	<i>Graduate Classes</i>				
	Mineralogy . . . . .	"	2	1	
	Laboratory Work, Mineralogy . . .	"	2	1	
	Paleontology . . . . .	"	1	1	1
BIOLOGY . . .	Laboratory Work, Paleontology . .	"	5	1	1
	General Biology . . . . .	Dr. Morgan	5	32	
	Plants, Vertebrates and Embryology, minor . . . . .	Drs. Morgan, Warren and Randolph	5		31
	Laboratory Work, minor . . . . .	Drs. Morgan and Randolph	5½	32	31
	Animal Physiology, major . . . . .	Dr. Warren	5	16	
	Laboratory Work, major . . . . .	"	5½	16	
	General Zoology, Theoretical Biology, Comparative Anatomy, major	Drs. Morgan and Warren	5		15
	Laboratory Work, major . . . . .	"	5½		15

*Tabular Statement of the Courses of Instruction given in 1896-97,  
continued.*

COURSE	DEPARTMENT	INSTRUCTOR	HOURS WEEKLY	NO. IN CLASS	
				1ST SEM.	2ND SEM.
BIOLOGY (continued)	Morphology, post-major . . . . .	Dr. Morgan	. 1 . .	6 . .	7 .
	Laboratory Work, Morphology . .	"	. . . . .	3 . .	4 .
	Physiology, post-major . . . . .	Dr. Warren	. 1 . .	7 . .	5 .
	Laboratory Work, Physiology . . .	"	. . . . .	5 . .	4 .
	<i>Graduate Classes</i>				
	Morphology . . . . .	Dr. Morgan	. 1 . .	5 . .	5 .
	Laboratory Work, Morphology . .	"	. . . . .	3 . .	3 .
	Physiology . . . . .	Dr. Warren	. 1 . .	4 . .	3 .
	Laboratory Work, Physiology . . .	"	. . . . .	2 . .	1 .
	Journal Club and Seminary . . . .	Drs. Morgan, Warren and Randolph	. 1 . .	4 . .	4 .

*VIII.*  
*Comparative Statement of the Distribution of Students in the various Departments of Study*  
*during the twelve years from 1885 to 1897.*

	Sanskrit and Com- parative Philology.	Greek.	Latin.	English Literature.	Anglo-Saxon.	German.	Teutonic Philology.	French.	Romance Philology.	Italian.	Spanish.	Semitic Languages and Biblical Literature.	History.	Political Science.	Philosophy.	History of Educa- tion and Pedagogy.	History of Art.	Mathematics.	Physics.	Chemistry.	Geology.	Biology.
1885-86,	..	30	18	32	..	7	..	10	1	2	..	..	8	..	..	..	..	32	..	10	..	10
1886-87,	1	20	24	39	..	17	1	3	2	..	2	..	15	..	19	..	..	29	..	6	..	22
1887-88,	1	28	36	39	3	42	4	25	2	2	4	..	..	13	45	..	..	12	11	16	..	25
1888-89,	2	40	35	67	7	50	4	26	..	..	1	..	63	17	16	..	..	23	10	10	..	27
1889-90,	6	46	58	76	9	44	4	21	..	1	1	..	34	24	20	..	..	28	7	11	..	26
1890-91,	1	42	59	86	6	46	3	23	..	4	1	..	54	30	16	..	..	35	6	24	..	26
1891-92,	2	36	75	92	8	46	1	28	1	5	1	..	46	40	28	..	12	24	7	31	..	42
1892-93,	4	38	45	135	10	60	2	30	1	8	4	4	57	54	28	..	19	27	27	45	..	42
1893-94,	4	44	80	156	15	71	3	50	1	10	5	7	53	70	52	..	..	32	20	45	..	47
1894-95,	5	51	91	170	10	75	6	83	5	8	9	12	86	53	57	..	..	34	20	71	..	53
1895-96,	3	47	90	179	17	63	11	75	5	8	..	9	85	49	67	..	75	34	16	73	9	84
1896-97,	8	49	100	185	9	74	5	55	4	14	6	13	99	63	79	34	64	33	18	48	3	60

## IX.

*Report for the academic year ending June 4th, 1896, compiled from the statements submitted to the President of the College by the instructors in the various departments.*

### *Sanskrit and Comparative Philology.*

The work in this department was under the charge of Dr. Hermann Collitz and Mr. Paul Elmer More. Mr. More gave two courses in Sanskrit, each for one hour weekly throughout the year, an elementary course attended by two students and an advanced course attended by one student. In the elementary course the students learned the paradigms in Whitney's Grammar and translated passages from Lanman's *Reader*. As far as was possible in the time given to the subject, a foundation was laid for a broader study of classical and comparative philology. In the advanced class selections from the *Māha Bharatā* and epigrams from Boehtlingk's *Indische Sprüche* were read.

A course of lectures on comparative Greek and Latin grammar was given by Dr. Collitz. Since only one hour a week could be allotted to this course, the lectures had to be restricted to a general introduction to the comparative study of the classical languages and to a discussion of selected chapters from Greek and Latin phonology. In future years at least two hours weekly should be given to this subject.

### *Greek.*

Dr. Herbert Weir Smyth conducted the graduate course in Greek. The work dealt with the melic poets from the earliest times to the fourth century B. C. Lectures were given on the literary history of the various departments of melic, on the rhythms and metres and the dialects employed by the different poets. The popular songs, the *solia*, and the chief fragments of the poets from Alcman to Simonides were interpreted by the instructor, and papers were prepared by members of the semi-

nary on difficult fragments of Alcman, Arion, Ibycus, Simonides, and Pindar.

The post-major, major, and minor courses were given by Dr. H. W. Smyth, Dr. M. L. Earle and Mr. P. E. More, as stated in the program.

In the post-major class Dr. Smyth read the *Agamemnon* of Æschylus in the first semester and Theocritus in the second semester. In the first-named course attention was directed to parallels from the English poets, especially the early dramatists. The class met two hours weekly.

Mr. More conducted a post-major course in Greek for two hours weekly throughout the year. In the first semester the class read Aristophanes' the *Clouds* and the *Frogs* ; in the second semester Aristotle's *Nicomachean Ethics*. In connection with the latter course lectures were given on the general history of Greek ethics. Another year it might be advisable to devote both semesters to Aristotle and enlarge the scope of the lectures so as to supplement the courses in philosophy and Christian ethics.

With a major class of ten Dr. Earle read the *Antigone* and part of the *Ajax* of Sophocles for three hours weekly during the first semester ; in the second semester the sixth book of Herodotus, and part of the seventh, were read. Mr. More lectured to the same class twice weekly throughout the year on Greek literature, discussing in the first semester epic and lyric poetry, in the second semester drama and prose. The lectures were devoted to the principal authors, and the poets were chiefly dwelt on as forming the most essential part of pure literature. The lectures were supplemented by private reading from the authors discussed, and from time to time hour examinations were given on this part of the work.

Dr. Earle read with a minor class of thirteen Plato's *Apology*, *Crito* and *Euthyphro* for two hours weekly during the first semester, and gave exercises in Greek prose composition, based on the text read, once weekly. In the second semester the same class read the *Medea* of Euripides and part of the *Alcestis*, and the exercises in Greek prose composition were continued. The

class improved noticeably during this semester, several of the examination papers giving proof not only of careful and intelligent study of the author, but of sound literary feeling. The humanity of Euripides made a distinct impression on the class. Mr. More read selections from books I. to XII. of the *Odyssey* two hours weekly throughout both semesters with the minor class.

The Beginners' Class in Greek was conducted by Dr. Earle for five hours weekly throughout the year. In the first semester the class was drilled in the forms and constructions of Greek sufficiently to be able to begin the reading of Xenophon, the ground covered being the first part of White's *Beginner's Greek Book*, about one hundred exercises. In the second semester the class read Xenophon's *Anabasis*, books I and II, Xenophon's *Hellenica*, books I and II (in part), and Homer's *Iliad*, books I—III. The work of this class throughout the year was most faithful and intelligent.

Dr. Smyth conducted the examinations in private reading of the minor and major students; the minor students were examined in Xenophon's *Memorabilia*, books I—II, and Andocides' *De Mysteriis*; the major students, in Sophocles' *Ædipus Rex* and Isocrates' *Panegyricus*. The character of the work admits of improvement, especially as regards the use of English. For the following year it is recommended that the students prepare written translations at least once a month in connection with their work in the minor and major classes, and that these translations be subjected to careful criticism on the part of the instructors.

### *Latin.*

Dr. Gonzalez Lodge conducted for four hours weekly throughout the year the graduate work in Latin. The subject of study was Roman Epistolography. The emphasis was laid upon Cicero and his friends. The letters of Cælius were made the subject of seminary interpretation, while the lectures discussed, in addition to Cicero's letters, those of his other correspondents, the metrical letters of Horace and Ovid,

the moral letters of Seneca, the correspondence of Pliny the Younger, and the letters of Fronto and Marcus Aurelius.

In addition, Dr. Lodge conducted a course on Latin Grammar for one hour weekly. In the beginning of the year the slight inscriptional remains of the Italic Dialects were read, and later the origin and development of the Latin alphabet and the formation of the Latin letters were discussed in detail. In connection with this work the members of the class prepared papers on Zimmerman's study of Cicero's use of the epistolary tenses; Latmann's study of coincidence in Cicero; Cicero as he appears in his letters; the use of the conditional sentence in Pliny's *Epistles*, books I. and II.; the use of the conditional sentence in Pliny's *Panegyricus*.

In the post-major course Dr. Lodge resumed a course in Plautus in the second semester, two hours weekly, in which three plays were read: the *Captivi*, the *Menachmi* and the *Rudens*.

During the first semester Dr. Earle read with a post-major class Cicero's *De natura deorum*, books I. and II., twice weekly; and taught advanced Latin Prose Composition to a post-major class, one hour weekly, the students writing directly in Latin on subjects assigned. Notwithstanding the difficulty of this most of the class made considerable progress. During the second semester Dr. Earle read Terence's *Adelphæ* and *Andria* two hours weekly with a post-major class, and had not the instructor been ill for three weeks at the end of the semester, a third play would have been read.

In the major course Dr. Lodge read as in previous years Tacitus' *Annals*, three hours weekly during the first semester, and selections from Horace, Juvenal, Tibullus and Propertius during the second semester. Selected letters of Pliny and Cicero were set as private reading. Mr. More lectured on Latin Literature to the same class throughout the year. The lectures were similar in character to those on Greek Literature.

In the minor course Dr. Lodge read with a class of about fifty students selections from the twenty-first and twenty-second books of Livy during the first semester and the second *Philippic*



of Cicero during the second. The same class wrote Latin prose exercises weekly during the year. In connection with this work it may be remarked that the weaker students showed very defective preparation, which seemed to be due in large measure to "cram." It is unquestionable that the Latin entrance examinations have *not* been made more easy in recent years, and it is likewise certain that the quality of the work done in the minor class has been poorer in the case of weak students. Inquiry leads to the conclusion that in some preparatory schools more attention is paid to coaching for the examinations than to teaching Latin with thoroughness. The result is temporary advantage in getting the candidates into college earlier, with permanent distress to the students later. Mr. More's reading with the minor class consisted of selections from Horace given twice weekly throughout the year.

The private reading of the minor class was for the first semester selected fables of Phædrus; for the second semester selections from the last six books of Vergil's *Aeneid*.

### *English.*

The graduate work in English was conducted by Dr. Mary Gwinn, Dr. James Douglas Bruce, and Dr. Alfred Hodder.

Dr. Gwinn met a class composed of graduate students in English Prose Writers of the Seventeenth Century two hours weekly throughout the year. The authors chosen for especial study were Bacon, Hooker and Milton. Parallel reading was assigned in the works of Clarendon, Fuller, Jeremy Taylor, Burton and Browne.

The class in the English Drama was conducted by Dr. Hodder and met for two hours weekly throughout the year. The first semester was devoted to the predecessors of Shakespeare, beginning with the miracle plays. In the second semester Shakespeare's successors, from Jonson to Shirley, were studied.

Dr. Hodder gave also a graduate course on the Development of the Modern English Novel. Eliot, Browning and Meredith were studied for themselves and also for their fitness to illustrate the movement in English fiction embodying the development in

the English mind in this century from the philosophy of Bentham and Mill to that of Coleridge and Hegel. Dr. Hodder met the class two hours, and sometimes three hours, weekly throughout both semesters.

Dr. Bruce conducted a graduate course two hours weekly throughout the year in the Middle English Romances. The whole of the first semester and a part of the second were devoted to the study of the romances connected with the Arthurian cycle. A series of lectures was given embodying the most recent investigations of Paris, Zimmer, Nutt, etc., on the origin and development of Arthurian Saga, and the rest of the time was spent in reading in class selected portions of the various romances and presenting and discussing reports on these romances assigned to individual students. The chief articles and books, mainly German and French, relating to medieval romance literature thus came up for report or discussion in the class-room. Besides the romances of the Arthurian cycle, in the second semester select Middle English romances, not included in this cycle, were studied with the class.

During the first semester Dr. Bruce gave a course in Middle English Phonology. This consisted mainly of the critical reading of dialectic texts with discussion of the relation of their sound-systems to that of earlier forms of English. The class met two hours weekly.

The undergraduate courses were arranged as stated in the program.

Dr. Gwinn met a major class composed of graduate and undergraduate students in English Criticism of Literature in the Nineteenth Century three hours weekly throughout the year. After a brief review of the history of modern criticism the class proceeded to study in detail the theories and criticisms of Matthew Arnold, Walter Pater and Mr. Swinburne, paying especial attention to their relation to the theories of Aristotle, Longinus, Taine, Hennequin, Sainte-Beuve and Victor Hugo.

Dr. Hodder met the same major class in Nineteenth Century Poets two hours weekly throughout the year. The course was intended to include Wordsworth, Coleridge, Byron, Shelley and

Keats, but the consideration of Shelley so overran the time allotted to it that it was found necessary to omit Keats.

Dr. Bruce met the minor English class (language course) five times a week throughout the year. During the first semester the class worked through the grammatical introduction in Bright's *Anglo-Saxon Reader*, and the majority of the selections in the same book, and read in conclusion the *Judith* and the first thousand lines of *Beowulf*. In the second semester the remaining portion of *Beowulf* was read with the class, the first seven passus of *Piers Plowman* (B-text), and part of the Middle English romance, *William of Palerne*. Lectures supplementary to the reading outlined above were given on the alliterative verse and subjects connected with the interpretation of *Beowulf*, and in the second semester especially the lectures treated the history of the English Language.

Dr. Bruce also met a major class (language course) three times a week throughout the year. The work with this class consisted of the translation and interpretation of a great variety of Middle English texts. In the first semester the texts were *Piers Plowman* (first seven passus of B-text), *The Pearl*, *Sir Gawain and the Green Knight*, *The AunTERS of Arthur*, and a part of the *Morte d' Arthur*. In the second semester *William of Palerne*, *Golagros and Gawain*, *Rauf Coilyear*, *The Buke of the Howlat*, Lawrence Minot's Poems, and some smaller pieces were read. Parallel reading illustrative of medieval life and literature was also assigned.

The lectures on literature of the General English Course, three hours weekly, were not delivered by President Thomas, as announced in the program, but by Miss Abby Kirk, who read the lectures and quizzed the students once weekly. The ground covered the period from Shakespeare, inclusive, to most modern times. The first year essay work was reorganised, the class being divided into four sections of about twenty students each, thus enabling each instructor to give closer personal supervision to the work of her students. In addition to the rhetoric work required in former years, a fortnightly sight-paper was given, in which special attention was paid to the construction of the paragraph. As in former years two essays

were written on authors chosen by the student. The second year essay work was conducted as usual. The work of the first and second years was conducted by Miss Kirk, Miss Keys, Miss Donnelly, and Miss Helen Thomas, under the supervision of Dr. Gwinn.

Miss Edith Pettit, of Philadelphia, was the Mrs. George W. Childs' prize essayist of the year.

### *Teutonic Philology.*

Graduate and post-major courses in Teutonic philology were conducted by Dr. Hermann Collitz and Dr. Max Blau. Owing to the appointment of Dr. Blau it has been possible in the past year to offer a larger number of courses.

A course in Gothic was given by Dr. Collitz twice weekly throughout the year. As in previous years, it included, in addition to the study of Gothic phonology and inflection, a brief survey of comparative grammar, intended to serve as an introduction to the comparative study of the Teutonic languages. The Gothic texts in Wright's *Gothic Primer* were read.

Dr. Collitz lectured on Old Norse, once weekly during the second semester. The elements of Old Icelandic grammar were studied in Sweet's *Icelandic Primer*, and the relation of the Icelandic sounds and inflections to those of Gothic and of the West-germanic languages were briefly explained. Some selections were read from the younger and older *Edda*.

The Teutonic Seminary met Dr. Collitz twice weekly throughout the year. Most of the seminary work consisted of exercises in interpreting Middle High German poetry. The selections were chosen so as to include on the one hand some rather difficult passages, and on the other hand texts that seemed best adapted to illustrate the condition of Middle High German manuscripts and the method of text criticism. The first semester and part of the second were given to Wolfram's *Parzival* (portions of the first and fifth book, together about seven hundred lines), the remainder of the second semester was spent in reading Hartman's *Iwein* (sections 9-29 of Lachmann's edition, lines 1-540). Several hours were set aside for reports by the students on important papers from various peri-

odicals, such as Westphal's *Auslautsgesetz des Gothischen* (in Kuhn's *Zeitschrift*, Vol. 2) and Verner's *Eine Ausnahme der ersten Lautverschiebung* (*ibid.*, Vol. 23).

A graduate class in Middle High German met Dr. Blau twice weekly. In the lectures (delivered in German) an abstract of the Middle High German grammar was given for the first semester, and a brief account of the "Nibelungenfrage" and the manuscript of the *Nibelungenlied*, in the second semester. The reading covered about 1,000 verses of Hartmann's *Armer Heinrich* and a large part (over 1,000 stanzas) of the *Nibelungenlied*.

#### *German.*

The instruction in German was given by Dr. Hermann Collitz, Dr. Max Blau, and Miss Rose Chamberlin.

The increase of instructors in the department made it possible to offer two post-major courses. One of these was given by Dr. Blau (in German) on German contemporary literature, treating especially the drama and the novel. The class met twice weekly, and read the following works: Sudermann; *Die Ehre*, *Sodoms Ende*, *Heimath*, *Frau Sorge*, *Der Katzensteg*; Hauptmann: *Ein-same Menschen*, *Hannele*.

Miss Chamberlin gave a post-major course on German syntax and advanced reading. The class, consisting of five members, wrote prose compositions weekly, and listened to lectures on syntax. They also followed a course of advanced reading, two works of Sudermann and selected essays of Chlovelius, Goethe, Gervinus, etc. Once in each semester the members of the class in turn conducted the work, the first semester in English, the second, in German. They each gave a short lecture on points of German grammar to a class of beginners in the language. The class is mainly intended for those preparing to teach.

The minor and major courses were rearranged so that each should consist of two hours of lectures on German literature (delivered in German), one hour of selected reading in connection with the lectures, one hour of critical reading, and one hour of prose composition. In addition to the class-work private reading was assigned to both the minor and major students.

In the major or second year's course Dr. Blau lectured on the

history of German literature from the earliest times to the end of the fifteenth century, and read with the class in literature selections from Old and Middle High German works in modern German translations. With Dr. Collitz the major class read critically selections from the second part of Goethe's *Faust*. The exercises in German prose composition were conducted by Dr. Blau.

For private reading the following works were assigned: in the first semester, Lessing's *Minna von Barnhelm*, *Laokoön* (selections), and *Nathan*; and in the second semester, Scheffel's *Ekkehard* (selections), Goethe's *Tasso*, and Keller's *Dietegen*.

In the minor or first year's course the lectures on literature were delivered by Dr. Collitz, who also conducted the selected reading. The lectures covered the history of Modern German literature from the middle of the last century to Goethe's death. For the selected reading the *Handbuch zur Einführung in die deutsche Litteratur*, by Hentschel and Lyon, served as a text-book. The critical reading in the first part of Goethe's *Faust* and the exercises in German prose composition were conducted by Dr. Blau.

The private reading was in the first semester Goethe's *Iphigenie*, Schiller's *Thirty Years' War* (selections) and Schiller's *Don Carlos*; in the second semester Lessing's *Emilia Galotti*, Goethe's *Egmont*, and Schiller's *Braut von Messina*.

In addition to the above classes a class in Elementary German was conducted by Miss Chamberlin, for students whose matriculation examination did not include German. The class read during the year as prepared work Hauff's *Das Kalte Herz*, Schiller's *Wilhelm Tell*, Freytag's *Journalisten*, parts of *Soll und Haben*, Schiller's *Der Neffe als Onkel*, Heine's *Harzreise*, and many poetical extracts. Numerous extracts from prose and poetical works were read at sight. Otis' grammar and parts of Thomas' grammar were studied.

### *French.*

The graduate work in French was conducted by Dr. Joseph Auguste Fontaine and Dr. Oliver M. Johnston.

The students met Dr. Fontaine three times a week. A course

on the French novel of the nineteenth century was given twice weekly. The romantic or poetic novel was studied in Chateaubriand, and the analytic and psychological in Benjamin Constant and Henri Beyle. Balzac, Flaubert, de Goncourt and Daudet were studied as examples of the realistic and natural methods of the modern French novel. A course in Old French syntax was also given once a week, in which special investigations were carried on by the students, and the earliest French texts were carefully examined, and made a basis of study. The students were also asked to write original French essays once a week on subjects selected from modern English and French literature.

Dr. Johnston conducted three hours weekly a graduate course in French Philology. The first semester of this course was occupied in the study of French phonetics. Each vowel was examined in pre-tonic, tonic and post-tonic position, and the laws governing its development as accented or unaccented were carefully noted. The phonetic history of each consonant was then traced, and the consonants classified according to their position as initial, medial or final. Consonant groups were next considered, with special reference to labial and palatal combinations. During the second semester French morphology was studied, the different modes and tenses of the verb were treated separately, and an explanation was offered for each form; the various forms of nouns, adjectives, adverbs and pronouns were examined. Two hours weekly were devoted to lectures, and one to practical exercises based on the *Chanson de Roland*.

Dr. Johnston conducted a graduate class in Old French Reading two hours weekly throughout the year. *Karls des Grossen Reise*, *Aliscons Roman de la Rose*, *Cligès* were read. Special attention was given to translation, rhythmic structure, and historical, social and literary points. The laws of syntax and idioms of Old French were also studied.

Dr. Johnston also conducted a post-major class in old French reading, twice weekly during both semesters, and read with the class the *Chanson de Roland*, *Aucassin et Nicolette*, *Karls des Grossen Reise*, and *Cligès*. In this course special emphasis was laid upon pronunciation, translation and practical syn-

tax. Attention was also called to the rhythm and the literary and social ideas of the poems.

Dr. Fontaine lectured on French literature to the major class two hours weekly throughout the year. The whole of the first semester and part of the second were taken up with the classical period. French comedy was studied in its classical origin with special attention to Corneille and Molière and a few of the preceding writers; an account was given of the old French drama and of its productions, the *mystère*, the miracle-play, the *moralité*, the *sotie* and the *farce*. The study of the French classical tragedy centered around Racine, whose *Andromaque*, *Britannicus*, *Phèdre*, and *Athalie* were carefully analysed. The prose writers of the period of Louis XIV. were also studied in the work of Descartes, La Rochefoucauld, Pascal, Bossuet, La Bruyère, Fénelon, and Massillon. Saint-Simon and his *Mémoires* will find a place next year in the course. During the second semester lectures were given on modern French literature. The writers belonging to the Parnassian school were considered. The works of Leconte de Lisle, Sully Prudhomme, François Coppée, de Hérédia and de Banville were critically examined. Also selections from Baudelaire were read and his theories explained. Finally, eight lectures were delivered on French criticism, Sainte-Beuve and Taine, and the most recent writers being treated. The students of the major course also met Dr. Fontaine three times weekly for critical reading of the classical writers, French composition and syntax; an hour was devoted to French conversation.

The students of the minor course attended twice a week during the whole year Dr. Fontaine's lectures on French literature of the eighteenth and nineteenth centuries. During the first semester the period of French Romanticism was studied, beginning with the works of Madame de Staël and Chateaubriand, and continuing with those of Lamartine, Victor Hugo, de Musset, de Vigny, Sainte-Beuve, Théophile Gautier, George Sand, Balzac, Mérimée. Other minor writers were also referred to and connected with the main representatives of that school. The aim of this course is to familiarise the students with the writers that begin the period of modern French literature, to acquaint them



with their literary theories, and later on to teach them to compare such theories with those of the classical writers. During part of the second semester a brief survey of the literature of the eighteenth century was given, and a special treatment of the novel of Lesage, Marivaux, Rousseau, Prévôt, Bernardin de Saint Pierre attempted. Of the three hours of the minor French course given by Dr. Johnston two were devoted to critical reading and one to composition. The texts read during the year were as follows: Pailleron, *Le Monde où l'on s'ennuie*; de Maistre, *Voyage autour de ma Chambre*, Alfred de Musset's *On ne saurait penser à tout*, Daudet's *Contes*, Victor Hugo's *Cromwell* and *Les Orientales*, Sandeau's *Mademoiselle de la Seiglière*, de Vigny's *Cinq-Mars*, Erckmann-Chatrian's *Les Fiancés*, George Sand's *François le Champi*, Mérimée's *Colomba*, and Balzac's *Le Curé de Tours*. The special aim of this course was to give students as much reading matter as they could carefully prepare in order that they might acquire an extensive vocabulary, and become familiar with the structure and idioms of the language. Constant practice was also given in pronunciation.

Miss Chamberlin conducted, five hours weekly, the course for beginners in French provided for those students whose matriculation examination did not include French.

### *Italian and Spanish.*

The major and minor courses in Italian and Spanish were conducted by Dr. Frederic M. Page.

The work of the class in major Italian, which met three times weekly throughout both semesters was general. The reading was as follows: Dante's *Vita Nuova*; *Divina Commedia*; about thirty cantos of the *Inferno* and *Purgatorio* (read in the second year because one member of the class had not studied Dante); Ariosto's *Orlando Furioso*, ten selected cantos; numerous shorter poems, illustrating the history of Italian lyric poetry (de Gubernatis' *Florilegio lirico*) from the thirteenth century to the beginning of the nineteenth; Alfieri's *Saul*; *I Promessi Sposi*; D'Azeglio's *I miei Ricordi*, *Ettore Fieramosca*. De Amicis' *Olanda*; extracts from

Gaspar's *Italian Literature*, bearing on subjects studied during the year; chapters from various novels for vocabulary study; and Symonds' *Introduction to Dante* for the study of Dante, were assigned as private reading. The work in grammar consisted of a review of grammatical forms, a study of the verbal system and irregular verbs, and of syntax. Sauer's grammar was used. One hour weekly was set aside for themes and translation of short stories in connection with sight reading. Italian conversation was practiced toward the end of the course as much as the time limit would allow. The work was very steady and progressive.

Dr. Page conducted the course in minor Italian for three hours weekly throughout both semesters. The class was composed of beginners. Extracts from De Amicis' prose works, Barrili's *Una notte bizzarra*, about sixty pages of Manzoni's *I Promessi Sposi*, Dante's *Divina Commedia*, fourteen selected cantos of the *Inferno*, and four cantos of the *Purgatorio* were read, translated, and commented upon. The elements of grammar were studied, namely, grammatical forms, including a full discussion of the Italian verbal system. About twenty-two so-called irregular verbs were carefully studied. Syntax was treated only in connection with reading and the requirements of composition. The English edition of Sauer's *Italian Grammar* was used. Some themes and exercises were written during the year, but this branch of study suffered necessarily in comparison with reading. It was not thought advisable to try to cover too much ground, and very little practice in conversation was possible. The results have been on the whole satisfactory. The class made good progress, and at the end of the session could read at sight any ordinary Italian.

The major Spanish course of two hours weekly throughout both semesters was attended by one graduate student only, who was able to cover a great deal of ground. Her work was concentrated upon the Spanish dramatists of the seventeenth century. She read Alarcon's *La Verdad Sospechosa*; *Las paredes oyen*; Molina's *Burlador de Sevilla*, and *La Prudencia en la mujer*; Calderon, *El Alcalde de Zalamea*; Lope de Vega, *La Estrella de Sevilla*; Rojas, *Garcia del Castanar*; her

prose reading in class was mostly at sight from Valera's *Pepita Jimenez*, and *Don Quixote*. The private reading was chosen from the works of Larra, Valera, and Cervantes. In addition Ramsay's *Spanish Grammar* was studied, and some original themes were written. A short time was devoted to conversation in Spanish, but the time limit, two hours weekly, precluded any very extensive use of oral work.

Five students attended Dr. Page's course in minor Spanish for two hours weekly throughout both semesters. Knapp's Reader, extracts from the works of "Figaro," Jose de Larra, Mesonero Romanos, Fernan Caballero, Jose Selgas, Lafuente, Burgos, Castelar, and Valera were read, and also eight chapters of *Don Quixote*. Knapp's grammar and grammar forms, including twenty-three irregular verbs, were studied by the class, and themes in Knapp's grammar translated and analysed.

#### *Semitic Languages and Biblical Literature.*

The work of this department was conducted by Dr. George A. Barton. In Semitic languages the following graduate courses were given:

The Assyrian Seminary met for two hours each week. The work for the year was Assyrio-Babylonian mythological poetry. The *Descent of Ishtar*, with the literature which has grown up about the poem, was carefully studied; the Babylonian *Creation Epic* was interpreted, and a critical study of all previous interpretations was made; about one-fourth of the *Gilgamish Epic* was studied in the same manner.

Two hours weekly were devoted to advanced Arabic. In this course an extract was read from Abû Ishâk Ahmed ibn Muhammed, the *Mu'allakât* of Imr-ul-Kais was interpreted, together with a large portion of the Arabic commentary on the same, and selections from the Qur'an were read. Syntax was studied throughout the course, and during the last few months a part of each hour was devoted to sight readings from the *Thousand and One Nights*.

A course of lectures, one hour weekly, on the History of the Arabic Caliphates and Civilisation, supplemented the work of the course on the Arabic language. The course opened with a

review of the condition of the pre-Islamic Arabs, sketched the life of Muhammed, the fortunes of the Medina, Damascus, Bagdad, Egyptian and Spanish Caliphates, outlined the general features of Arabic culture, described the chief tenets of the principal Islamic sects, and closed with a brief review of Arabic literature and philosophy. The lectures were accompanied by assigned reading parallel to the subject in hand, concluding with a study in German translation of the *Metaphysics* of Ibn Sina (Avicenna) and some of the philosophical essays of Al-Farabi (Alfarabius).

Two hours a week were given to a class in Elementary Hebrew. The class was a very industrious one, and much more was accomplished than ordinarily in such a class. The elements of the language were mastered, the whole of *Genesis* was read, with a view, not only to the formation and structure of the language, but also to the documentary analysis; syntax was studied, and considerable time was given to Hebrew prose composition, portions of the Gospel according to Matthew being translated into Hebrew.

In Biblical Literature the work was as follows:

A course, one hour weekly, treated the interpretation and criticism of the New Testament Apocalypse. The modern critical study of the Apocalypse is but fifteen years old, and yet a large literature on the subject has been produced in that time. In the class-room the book was first interpreted from the Greek text, and then studied in the light of the critical literature. Special attention was given to the theories of Vischer, Schoen, Spitta, Völter, Gunkel and Briggs. Parallel studies were also conducted in the Apocalypses of Daniel, Enoch and Baruch.

One hour weekly was spent in a study of the Hebrew Prophets. Critical introductions to the various books were given in the lectures, and the text was read in translation, analysed, and difficult portions interpreted. In this way a knowledge of the personality of a prophet was gained, and his writings were studied in the light of his environment.

During the first semester one hour weekly was devoted to Hebrew Poetry. A careful study of the poems scattered through the early historical books was made; the structure of the Psalter

and many of its best lyrics were given especial attention. The course closed with a study of the Book of Job. In the second semester this hour was given to the study of Pentateuchal criticism. The work consisted of the inductive study of the laws and narratives with constant reference to the arguments of the opposing schools.

Dr. Barton also conducted the undergraduate course in Biblical literature required as part of the course in general philosophy, which was this year devoted to the New Testament books. The environment of the Apostolic Age was first studied, next the transmission of the New Testament, then the *Epistles of Paul* were taken up in detail, and the lectures concluded with a study of the composition of the Gospels.

Dr. Barton also gave a course of ten lectures on Christian Ethics as part of the course in required philosophy.

#### *History of Art and Archæology.*

Three courses, the history of Greek art, the history of Italian art, and an advanced course on the history of Italian art open to those students only that had completed the first year course in Italian art, were given by Mr. Richard Norton as announced in the program. The graduate course in classical archæology was not elected and was therefore not given.

#### *History.*

The instruction in history during the past year has been under the charge of Dr. Charles M. Andrews. To the graduate students three courses were open. The first, on historical method, was given twice weekly during the first semester, and was in reality three separate but closely related courses, each consisting of about nine lectures: the first on modern conceptions of history; the second on historiography in general; and the third on the canons of historical criticism. That portion of the course on the various philosophies of history which was given last year was omitted. The second graduate course was on the history of the Roman law. It occupied two hours weekly during the second semester. The third graduate course on the history of the community, once weekly throughout the year, was re-

stricted to the study of English local institutions in the period before the reign of Edward III. The advances made in recent years in the study of the subject made it necessary to spend considerable time in the examination of the different views held and theories advanced regarding the primitive village community, the origin of the manor and the borough, the rise of the guild, local, judicial and agrarian institutions, etc. The theories of Freeman, Seebohm, Vinogradoff, Maitland and others were presented and discussed.

To the undergraduates post-major and major courses were given. The post-major course in English constitutional history occupied two hours weekly throughout the year. The text-book used was Stubbs' *Select Charters*, and the extracts were selected with special regard to the development of English institutions in the period of the forming of the constitution. Stress was laid upon the economic, judicial, and financial features of this development, and the results of the investigations of Round, Gross, Pollock, and Maitland, which have done so much within the last two years to elucidate this period of English history, were brought to the attention of the class. Special features of the course were the study of *Domesday Book*, the rise of representation, knight's service and scutage, the judicial system, and trial by jury. Very few lectures were given, but the class was questioned, not only on the texts assigned, but also on widely distributed groups of references for private reading. Taken as a whole the results of the course were eminently satisfactory.

The major and minor course upon the history of Continental Europe from 1589 to 1878 occupied five hours weekly throughout the year. During the first semester the class consisted of seventy-eight students, of whom three were hearers; during the second semester, of eighty-five students, of whom four were hearers. The course was conducted entirely by lectures, supplemented by private reading, upon which monthly examinations were held. To meet the requirements of such large classes considerable additions were made to the hall libraries, each of which now contains some thirty volumes.

*Political Science.*

The work in this department was conducted by Dr. Lindley Miller Keasbey. As yet no courses have been given to which undergraduates are not admitted. Dr. Keasbey is now anxious to begin definite graduate work, and his preliminary plans are made so as to undertake graduate work during the coming year.

The post-major, major, and minor courses in political science are designed to cover a three-years course of undergraduate study in this department. This year completing the third of the present professor's term of office opportunity was thus offered of testing the success of the co-ordination of studies adopted. Judging from the grades attained, and from the general scholarship of the students who this year completed their three-years course, the instructor is gratified with the results of the work thus far done, and is encouraged to continue in the further elaboration of his plans.

The post-major course in descriptive sociology was, with some minor changes, the same as that given during 1895-96. This course is to be considerably extended during the coming year both in concept and in detail, as will be announced in the forthcoming program. This course is based upon, and forms a continuation of, the course in economic geography, mentioned below.

A new post-major course was given this year in theoretical sociology, and enough was learned of the requirements of such a course to encourage the instructor to plan to repeat it during the coming year. This course is designed to follow and complement the minor and major course in the history of political and economic theory that will be offered again during the coming year.

Special attention was given during the year to the improvement of the minor and major course on economic geography. The class numbered about fifty, and though the work was difficult, general interest was displayed in the course, and the general results were very satisfactory. Courses of this kind, though fundamental, are comparatively new in America, and it is desired to place them on a firm footing in Bryn Mawr. The work this year was seriously hampered from a lack of suitable books,

charts and maps, and it is hoped that before the lectures are repeated in 1898-99 a beginning may be made toward providing the necessary books and apparatus.

### *Philosophy.*

The work of this department was conducted by Dr. Dickinson Sergeant Miller, Dr. George A. Barton, and Dr. Lightner Witmer.

The graduate work, carried on under the direction of Dr. Miller, was in German philosophy. Two original papers were presented, on "the philosophy of Fichte," by Miss Georgiana Goddard King, Fellow in Philosophy, and on "the relation of Hume and Kant," by Miss Ellen Rose Giles. Miss Giles will continue her work on the latter subject next year.

In the major course in philosophy Dr. Miller gave a course three hours weekly in the German Idealists—Kant, Fichte and Schopenhauer, with a preparatory study of Hume. This was for a time interrupted by the instructor's illness.

\*Dr. Witmer lectured in the same course for two hours weekly on Physiological Psychology, which was thrown open also as a free elective. The course during the first semester dealt with the general relations of mental and physiological processes, and gave an outline of Physiological Psychology; it included an examination of the relation of mental traits to the physical characteristics of the body, and a consideration of individual differences in mental and physical constitutions, with reference to the place of the human being in phylogenetic and ontogenetic development. An analysis was given of the physical and mental antecedents of bodily movements, and the functions of volition and of emotion and impulses of automatic and reflex nervous activity were studied. Considerable attention was paid to the structure of the central nervous system and to the localisation of the different sensory, motor, and associative functions of the cerebral hemispheres. A set of three models of the brain was furnished to each student, and prepared specimens of the human brain and of ox brains were examined by the class. Three large charts were prepared for the use of the class, based upon latest investigations



into the minute structure of the nervous system. These were supplemented by numerous photographs of sections of the human brain, a complete series of eleven photographs being given to each student. It is somewhat difficult to give students of psychology, within the time assigned to this course, the exact information concerning the structure of the central nervous system, which is necessary for the comprehension of the problem of mental organisation, as this is related to the complex physiological organisation of the brain. The material supplied to the students for demonstration increased considerably the effectiveness of the course in imparting this essential knowledge of the anatomy and physiology of the nervous system. During the second semester the problems of perception were developed mainly through the instrumentality of class and individual experimentation. A fund provided for the purpose enabled the instructor to illustrate some of the more important problems of experimental psychology with simple experimental apparatus. The course considered the nature of sensation, its quality, intensity, and so-called feeling tone; the problem of introspective analysis; the relation of sensation to the external physical stimulus, including the psychophysical methods and the chief problems of psychophysical analysis; the relation of the sensation to the structures of the sense organs, a problem in psychophysiological analysis; the after-effect of stimuli upon the nervous system, including the modification of sensation through fatigue and contrast, after-images, memory images, and complex or organised memory; and lastly, the processes of association and apperception involved in perception. A number of the students performed in a satisfactory way several series of experiments supplementary to those required in the course.

A series of general mental tests was undertaken for the purpose of obtaining data for the comparative study of the mental processes of the college student, and bringing such data into relation with the results of physical examination made by the department of physical education. Over 100 students were examined, and satisfactory results were obtained on reaction time to sound, rate of movement, sensitivity to pain, fineness of discrimination for lifted weights, and minimal pressure stimuli. Valuable

assistance in the conduct of this work was given by a graduate student. The hearty co-operation and interest of the students in these tests will make it possible to continue them on a more extensive scale next year. It is hoped that the results will not only contribute data to comparative psychology, but may serve in conjunction with the measurements made by the department of physical training to render the various influences of college life more effective for the individual student's progress in mental and physical capability.

The required course in general philosophy, including introductory studies in logic, psychology, history of modern philosophy, and ethics, was conducted by Dr. Miller, as before, except in logic. In this branch the traditional text-book with its set rules was entirely abandoned, and an attempt made to lead the students to discover the laws of logic for themselves by the critical analysis of ordinary argumentative literature. Mill's *Liberty* was chosen for this purpose, and the work was carried on by discussion in class. It was interrupted in December, and left incomplete on account of the instructor's absence for some weeks, due to illness. It will be repeated next year. There was an average attendance of forty-six students in this course.

The lectures on Biblical literature were delivered by Dr. Barton for one hour weekly throughout the year, as stated in his report on page 64.

### *History of Education and Pedagogy.*

Dr. Hermann T. Lukens delivered the lectures in this department, which were not announced until after the opening of the college in October. It was then decided to offer two courses of lectures in Pedagogy and History of Education, each for one hour weekly throughout the year. These courses were made free electives, and hearers were welcomed to the classes. The continued attendance on the lectures by these voluntary hearers was a source of great encouragement. In the early part of the year it was deemed expedient to discontinue the conferences, and devote the whole of the very limited time to the lectures. Written reports were required on special topics in both courses. Monographs, articles,

and standard works for supplementary reading were assigned in connection with the lectures, and faithfully studied. The work in this department was greatly crippled by the meagre time allotted to it, and by the almost utter lack of books and periodicals on education in the library. Between thirty and forty dollars were made available as a special library appropriation for the department during the year; but the lecturer had to supply most of the books, journals and monographs used, and lend them to the students for reference. More than a score of charts, diagrams and tables were specially prepared for use in the lectures during the year. The aim of the lectures was, not merely to convey information or take the place of reading, but to supplement what is available in books, to stimulate interest in new directions, and to encourage further work.

### *Mathematics.*

The work of this department was conducted by Dr. Charlotte Angas Scott, Mr. James Harkness, and Dr. Isabel Maddison.

In graduate mathematics Dr. Scott lectured two hours a week throughout the year on Geometry on a Plane Algebraic Curve. In the first semester the lectures followed the lines of the numerous Italian memoirs by Bertini, Segre, Castelnuovo, and others. In the second semester the theory was presented in its German dress, due particularly to Brill and Noether; for this part of the work Clebsch-Lindemann, *Vorlesungen über Geometrie*, was used as a text-book. Mr. Harkness lectured two hours a week throughout the year on Elliptic Functions. This course was a continuation of a general course given in 1895-96 on Algebraic Functions, Elliptic and Abelian Integrals. It began with an historical account of the discoveries made by the founders of the subject of Elliptic Functions, and then dealt more particularly with Weierstrass's work. Incidentally, attention was called to the applications to mechanics and the geometry of curves. The principal text-book used was Halphen's *Fonctions Elliptiques*, but many references were given to other works. As the personnel of the graduate classes was the same as in the preceding year, the instructors found it possible to

give a more systematic treatment of advanced topics than is ordinarily possible. This continuity in the work enabled the department to found with success a Mathematical Journal Club, which met once a fortnight to listen to reports on subjects which were not included in the graduate instruction for the year. The reports given were as follows:

Dr. Scott : (1) Non-Euclidean geometry ; (2) Circuits, or the real branches of algebraic curves.

Mr. Harkness: (1) Modern researches on the number-system; (2) Numbers and functions of an algebraic corpus.

Dr. Maddison: Curves which cover an area of the plane.

Miss Gates : (1) Theory of symmetric figures ; (2) Regular reticulations and regular branches upon a Riemann surface.

Miss Martin: The representation of regular groups by color diagrams.

Miss Pearson: The problem of map coloring.

Miss Ragsdale : The transcendency of  $e$  and  $\pi$ .

Our cordial thanks are due to Professors F. Morley and E. W. Brown, of Haverford College, for their kindness in presenting communications on Apolarity and Infinite Determinants.

Three of the graduate students, namely, Miss Gates, Miss Martin and Miss Ragsdale, have received European Fellowships, and propose to study in 1897-98 under Professor Klein at Göttingen. The Bryn Mawr and the Mary E. Garrett European Fellowships for the years 1896 and 1897 respectively were awarded to Miss Ragsdale and Miss Martin, and the Northwestern Alumni European Fellowship to Miss Gates.

The Hon. Bertrand Russell, Fellow of Trinity College, Cambridge, gave a course of six lectures on the Foundations of Geometry by the invitation of the President and Trustees and the Mathematical Department. These lectures were attended by a large number of Bryn Mawr students interested in mathematics and philosophy, and by several representatives of neighboring colleges. The department is under a deep debt of gratitude to Mr. Russell for his interesting and instructive account and criticism of existing theories on metageometry. The lectures were valuable, not merely intrinsically, but also for the stimulus that they have given to the study of geometry.

In post-major mathematics Dr. Scott lectured for two hours a week throughout the year to a class of two in the first semester on the elements of the general theory of higher plane curves; in the second on point- and line-cubics. The text-book was Salmon's *Higher Plane Curves*, but the subject was treated in the second semester almost entirely by lectures. Mr. Harkness lectured two hours a week throughout the year to a class of three on selected topics in the theory of discontinuous groups. Frequent references were given to the standard works of Jordan, Netto, Serret, and to Weber's *Algebra*; but in view of the rapid extensions that are being made in this important branch of mathematics, the subject-matter was drawn chiefly from memoirs in the principal mathematical journals.

The appointment of Dr. Isabel Maddison as Reader in Mathematics has made it possible to place the post-major instruction on a more satisfactory basis. Henceforward the full five hours will be offered by the three instructors.

The minor and major courses were conducted in strict accordance with the program.

An important alteration has been made in the instruction offered in required mathematics. The course on solid geometry has been discontinued, and replaced by one on geometrical conics. This change will not affect in any way the regulations for students preparing for entrance to Bryn Mawr, the matriculation examination in solid geometry still being retained. The modification just mentioned is due to the belief of the department that solid geometry, while admirably adapted for school instruction, is unsuited for collegiate work. The regulations are so framed that any student desiring to take solid geometry is still able to do so. It is interesting to note that when the change came into effect in February of this year, half of the class had already taken the solid geometry examination, and attended the course on geometrical curves as a free elective. As stated in the program both courses in required mathematics, trigonometry and geometrical conics, will be offered each semester.

*Physics.*

The work of this department was conducted by Dr. Arthur Stanley Mackenzie and Dr. Edgar Buckingham.

Dr. Mackenzie gave graduate lectures on sound for three hours a week during the first semester, and for two hours a week during the second semester. This course dealt at first mainly with the theory of sound as applied to music, with special attention to the experimental work of Helmholtz, Koenig, Hermann and others in intermittences, beats, combinational tones, etc. Later in the course Lord Rayleigh's treatise was more closely followed.

Dr. Mackenzie also delivered graduate lectures for two hours a week throughout the year upon the equations of heat conduction. The course began with a careful study of Fourier's Theorem from a purely mathematical standpoint. The problems in cabling and telephoning that give rise to the same differential equations as those of heat conduction were treated at considerable length. As the students in both these classes were exceptionally well prepared to profit by the lectures, the result of the year's work was considered very satisfactory.

Dr. Buckingham gave graduate lectures on thermodynamics to three students for two hours a week during the first semester. The course was devoted mainly to a systematic statement of the fundamental principles and especially of the assumptions upon which they are based. The latter part of the course treated of applications such as dissociation, the phase rule, etc.

The Physical Journal meetings were kept up, and proved particularly valuable to those students attending and taking part in them.

Miss Lowater, the fellow in the department, gave much of her time to her work in the laboratory. She began the study of some problems in spectrum analysis, and has made good progress, considering that much of her time had to be devoted to the making of apparatus not possessed by the laboratory. She leaves her work this year in an unfinished state, but with good hopes of finishing it in the coming year, when she returns to the department in the capacity of demonstrator. Another graduate student worked in the advanced laboratory during the

second semester upon the determination of  $H$  in the non-magnetic room, and with satisfactory results.

Our skilled mechanic has added many useful pieces of apparatus to the laboratory stock, and has again demonstrated the value of such an adjunct to the department's resources. The remark made a year ago must be repeated, that a new lathe is urgently needed in the workshop, the present one being worn out and entirely inadequate to do the class of work required.

The acquisition of Poggendorff's *Annalen* for the physical library is gratefully acknowledged; during the year this journal has been continually of service, both to the instructors and graduate students.

A post-major course in dynamics was given to advanced students by Dr. Buckingham twice weekly during the second semester.

The courses of study pursued by the classes in minor and major Physics were those outlined in the program. The progress of both classes was satisfactory to the department, especially that of the minor class in the work of the laboratory.

### *Chemistry.*

The work of this department was conducted by Dr. Edward H. Keiser and Dr. Elmer P. Kohler. Dr. Keiser lectured to graduate students on thermochemistry and related subjects. The lectures began with a brief account of the historical developments of thermochemistry; this was followed by a description of the apparatus used in making thermochemical measurements, and then the students were shown how to use the results thus obtained, and how to work with thermochemical equations. The thermal data of the more important reactions were discussed, and used in illustrating the laws and principles that have resulted from a study of thermochemistry. In the second semester the second law of energy was taken up and its bearing upon chemical problems was considered. In this connection the conditions of chemical equilibrium, the stability of chemical systems, the law of phases, and the influence of temperature upon the rapidity of chemical action were discussed.

As in previous years the instructors and advanced students met

once a week to hear reports upon and to discuss the articles that appeared in the current chemical journals.

Dr. Kohler discussed theoretical problems in organic chemistry in lectures and conferences. The theory of organic compounds considered from the historical standpoint was first taken up, and was followed by a presentation of the theories that at present are universally accepted and serve as guides in all experimental work in organic chemistry. The lectures concluded with a discussion of those views that are not universally accepted and that supply the main subjects for research in this field of work. In all the lectures special attention was directed to the relation between theoretical and experimental work, and the greater part of the time was devoted to a study of the experimental methods employed in the solution of theoretical problems. The principal subjects studied were: structural isomerism, tautomerism and molecular rearrangement, optical isomerism, geometrical isomerism, and stereo-chemistry of nitrogen. In the conferences the most recent work in these problems was reported upon by members of the class, and its scope and importance discussed in connection with the matter presented in the lectures.

In the laboratory the advanced students were engaged in preparing typical organic compounds and in making analyses of organic substances. The fellow in chemistry carried on an investigation, the object of which was to transform the methyl side chain in parahydroxymetamethoxytoluene into the aldehyde group. The work, however, was not completed. There were also carried on in the laboratory researches upon the aliphatic sulphonic acids, the results of which are now in print; and upon the oxidation of the unsaturated phenols such as eugenol, isoeugenol, safrol and isosafrol. In connection with the latter work a new and simple method of transforming eugenol was discovered.

The graduate work has been greatly facilitated by the acquisition (purchased from a portion of a gift given by Miss Garrett of Baltimore) of a series of the *Annales de Chimie et de physique* extending from the year 1841 to 1888.

In the major course two lectures a week were given by Dr. Keiser on organic chemistry. The methods of formation and



the chief properties of the carbon compounds were the main subjects of the course, and in addition the transformations and classifications of organic compounds were discussed. Special attention was given to the subject of constitution, and in this connection the recent developments of the theory of valence and of stereochemistry were considered. In the laboratory typical carbon compounds were prepared and their behavior studied. Dr. Kohler's work with the major class was somewhat different from that of previous years. In the first semester three hours a week were devoted exclusively to a discussion of analytical methods. This made it possible to treat analytical separations both from the qualitative and quantitative point of view, and greatly facilitated the work in the laboratory. As a consequence the laboratory work in analysis that heretofore extended through the whole year was disposed of in the first semester, thus leaving the entire second semester for work in organic chemistry. During the second semester Dr. Kohler gave two lectures weekly upon chemical theories, and one hour a week was taken up with a discussion of the elements of crystallography.

Three lectures weekly were given to the minor students by Dr. Keiser. As in previous years the preparations and properties of the elements and compounds formed the chief subject of the lectures. The ground formerly covered was gone over somewhat more rapidly, and in addition a detailed discussion of the laws and principles of chemistry was given. More difficult examination papers were set than heretofore, and throughout the year a higher grade of work was required from the minor students. Dr. Kohler gave one hour a week to lectures and one to reviews, but during a large part of the year the reviews were suspended and the time was used for additional lectures. These lectures were designed to supplement Dr. Keiser's course in general chemistry, and dealt with those subjects, partly chemical and partly physical, which it is necessary to know in order to make laboratory experiments to the best advantage, but which cannot be well considered in a systematic course in general chemistry. The following were some of the topics considered : methods of weighing and measuring ; the laws of matter in the

different states of aggregation ; changes in matter under the influence of heat, light, and electricity ; the properties of solutions ; chemical calculations ; and analytical methods. The reviews were conducted as informal conferences in which any difficulties that arose in regard to the matter presented in the lectures were cleared up, and the results of the laboratory work emphasised.

### *Geology.*

One undergraduate and two graduate courses were conducted by Dr. Bascom during the past year.

Two hours of lectures and two hours weekly in the laboratory were devoted during the first semester to a graduate course in mineralogy. This course is arranged for students who have already studied minerals from the chemist's standpoint, and who are familiar with blowpipe determinations. In the lectures the morphology of crystals was presented in detail with the aid of models, and Fedorow and Schonflies' recent deduction of all theoretically possible crystal forms was, for the first time, made a subject of study. In the laboratory problems in crystal projection (linear, orographic, clinographic and spherical projection) were solved.

A graduate course in palæontology was conducted. Six hours a week in the laboratory, with informal weekly lectures and quizzes, throughout the year, were devoted to this course. Beside a detailed and systematic survey of the entire series of ancient invertebrate life, the groups Brachiopoda and Lamellibranchiata were made the subject of especial study. The aim of this course was threefold : to lay a foundation for all biological study by a systematic review of ancient life, to give an insight into research methods by a detailed study of selected groups, and finally to develop the principles of palæontology as they throw light upon the question of the development of life. For this threefold purpose, the department is fairly well equipped with a working collection of invertebrate fossils and, in the case of the more important groups, with the necessary literature. For the immensely important study of vertebrate life, the de-

the lecture work of this course.

Dr. Bascom also completed considerable petrographic and field-work for the U. S. Geological Survey.

Recent accessions to the collections are, by purchase: a suite of 86 rock specimens from the Lake Superior regions; by exchange: from the U. S. National Museum, 10 fine mineral specimens; from T. D. Rand, 15 mineral specimens; from Prof. E. W. Claypole, Akron, Ohio, 50 fossil specimens. Other gifts have been promised or are on the way, from Columbia University and Amherst College, and from private collectors.

The department has won a place on the exchange list of State and U. S. Surveys and geologists, both American and foreign. In this way current geological literature is constantly being added to the library.

The department has been fortunate in receiving a visit from the most distinguished of English geologists, Sir Archibald Geikie, Director-General of the Geological Surveys of Great Britain and Ireland.

Twenty-eight different species of fossils have been collected

\* THREE and possibly FOUR of these students intend to continue their work at Wood's Holl during the summer. It has been recognised for many years that a well equipped biological laboratory must be connected in some way with sea-side work. Wood's Holl gives us the best possible outlet for such work. We are not in a position to send out parties of investigators, like Johns Hopkins and Columbia, or to establish a laboratory of our own on the seashore like Harvard, but we can accomplish somewhat the same end by supporting as one of the co-operative colleges a table at Wood's Holl. Our students have gained a great deal by coming in contact at Wood's Holl with students from other colleges; and, conversely, the best interests of Bryn Mawr have been served by encouraging our best students to study at Wood's Holl with students from other colleges and universities.

Dr. Warren's lectures for graduates were upon Certain Problems of Nutrition, and dealt particularly with the more recent views concerning urea and its formation in the body, and the experimental evidence bearing upon this question. Graduate laboratory work was done by one student during a considerable

portion of the year sufficient in amount to complete the requirement for her secondary subject for the degree of doctor of philosophy. A part of this time was occupied with the methods of solving some of the problems of digestion. Much care and time was devoted to collecting material for an examination of what may be called physiological tremor, using for this purpose a tentative form of apparatus designed in the laboratory and constructed in the workshop.

The workshop continues to be a source of unalloyed satisfaction. Its value has again been demonstrated most amply in the repair of apparatus, and also in the making of new appliances. Mr. Banner has built a pair of unusually large recording drums of very light material, so that records of exceptional size can be taken. The drums are also mounted in such a way that they may be used together in making long records. For another drum of the ordinary size a new form of mounting has been made so that the common clock-work used for revolving tables in shop windows may be employed as a motor. Mr. Banner has constructed a somewhat novel form of acoustic interruptor which will probably be valuable in experiments where a wide range of frequency of stimulation is required. A modification of the sphygmograph of Marcy has also been devised, with a view to obtaining longer records than are given by the common form of that apparatus. This instrument has not yet been tested. That the workshop has been useful in making numerous devices of temporary value in laboratory work needs only to be mentioned in passing. At present Mr. Banner is making a motor of considerable power, utilizing an old clock-work which has been rusting in the storeroom for several years, having ceased to be of any value for its original purpose. Several instruments are also under construction that will be needed for demonstration of the methods of applying electricity as a stimulus to nerves and muscles.

The laboratory equipment has been increased by a most acceptable gift. Miss Sampson has presented to the laboratory a spectroscopic eye-piece (microspectroscope) of the Abbe model, and made by Zeiss. This will be valuable, as it enables the methods employed in the qualitative determination of small

quantities of blood or traces of other coloring matters to be demonstrated in the laboratory.

The library, in so far as physiological subjects are concerned, shows no improvement over the past few years. Dr. Warren has been compelled to send students to special libraries on his personal introduction, and to provide many books from his own library that the college library ought to possess.

The minor, major and post-major courses were the same as in previous years. Dr. Warren's post-major lectures were on the Central Nervous Systems of Mammals and were attended by six undergraduates. During the first semester they were also heard by one graduate student who had attended half the course last year. Post-major laboratory work, equivalent together with post-major lectures to a full five hours' course, was done by Misses Gray, A. Jones, A. H. Thomas, and Towle. Miss Hamilton divided her time between physiology and morphology during the first semester, but gave all her time to the latter subject in the second. Miss Gray has made a laboratory study of some of the digestive ferments, familiarised herself with the methods of measuring the coloring matter of the blood, examined the working of the capillary electrometer in the investigation of the currents of nerve and muscle, and tested a new method of taking pulse tracings from the finger nail, which has been recently recommended. Miss Jones made a large and careful study of the behavior of the milk-curdling ferment as found in the gastric mucous membrane and under various experimental conditions. In the second semester she has also studied with much faithfulness the elasticity of muscle and the effect of changes in the position of the load upon the extent of contraction. Miss Thomas has tested the ordinary methods for obtaining liver glycogen with reference to some possible improvements that had suggested themselves to us. She has also familiarised herself with the determination of hæmoglobin and the enumeration of the corpuscles of the blood. The larger part of her time has been given to a very industrious study of the rate of the frog's heart and the effect upon it of the application of heat and cold and also of various drugs, as well as the relation of their influence to the temperature. In this connection she has

had an opportunity to use the apparatus of Williams for nourishing the isolated heart. Miss Towle undertook an examination of the new methods for staining the salivary and gastric glands. This work was done with much care and great industry, and proved profitable as a study of technical points, although the general results were negative. Miss Towle has also been engaged in a search for the milk-curdling ferment in the digestive apparatus of invertebrates. Thus far she has examined the earthworm, oyster, clam and June bug. The results are as yet very incomplete and also somewhat discordant. Dr. Warren has recently reported this work and discussed it at a meeting of the American Physiological Society at Washington. Miss Hamilton worked almost altogether on the methods of staining nervous tissues for microscopical examination.

The minor class of thirty-one students was not as large as that of last year, but the major class of sixteen students was larger than ever before. The laboratory directions used by our minor class are now being printed in book form by Dr. Randolph. The attendance was satisfactory and the laboratory work was exceedingly well done, its average quality being rather better than usual. With one or two exceptions the major class was a particularly industrious and interesting class.

The department is in great need of more diagrams for undergraduate work. As compared with the larger places where similar courses are given the supply of charts, diagrams, etc., is very inadequate. It makes the lectures of much greater interest to have them well illustrated, and the subject can be much better taught by such means.

### *Physical Training.*

The department of physical training is under the charge of Dr. Alice Bertha Foster.

The work of the department of physical training began on the second of October by a brief talk to the freshman class on the value and objects of the exercise required by the college. Another advance was made this year in connecting the scientific side of the work more visibly with the practical. Charts were, for the first

time, furnished for all the four classes, putting Bryn Mawr in advance, so far as can be learned, of other colleges in oversight of the physical training of the whole student body. The charts of the three lower classes bore the curves of successive half-yearly measurements, showing the gains during the gymnasium year and losses during the vacations, each autumn line, however, being better than the previous autumn, and each spring than the preceding spring. There were few exceptions; the rule was proved by the mass. The autumn and spring athletic season count with the vacation time, as the examinations are made after the autumn season and before the spring. The seniors' charts bore only their freshman entrance curve and that of their senior autumn, showing both what gains had been made in the past three years and what was still to be done, if possible, in the last months. These charts showed results in accordance with those stated in this report last year. In the spring the final senior measurements to these same charts were added, showing the gains of the first three years, of the fourth year alone, and also of the entire four years. The students showed so much interest in these charts, and so much desire to possess them, that the present juniors have been promised duplicates when they leave the college.

Another interesting innovation was a set of comparative tables showing the relation of each undergraduate student in the college to each of her classmates in the items of "capacity of lungs," "total strength and lung capacity," and the last item modified by the height. Standing height is an important modifier of any standard, including lung capacity. An important point was brought out in dividing the freshman class by the last named standard into "weak" and "strong" sections. A large majority of the entering students who had no previous training, or had had only Swedish work, were in the former division, while almost every student who had had German or American gymnastics was in the latter, and the "personal histories" confirmed the indications of the tests. These tables were posted conspicuously, and proved a strong incentive to work for strength gains.



The classes were divided as last year:

Freshmen, weak, Swedish.  
 Freshmen, strong, German.  
 Sophomores, weak, Swedish.  
 Sophomores, strong, German.  
 Juniors, all German.  
 Seniors, all Swedish.

During the year the sophomore "weak" division were all brought up to the German work, while many of the freshman "weak" class were promoted by request, as their strength and skill increased. The seniors were changed at the beginning, by petition of the class, to Sargent class work, including chest weights and German light apparatus. To this willingness to continue chest-weight work Dr. Foster attributes the unusual gains obtained in their chest measurements, usually little gain being expected in this respect after three consecutive years' training.

The measurements taken were in October and November, as follows.

#### First Measurements.

Freshmen .....	62
Non residents .....	2
Hearers .....	2
Sophomores .....	1
Juniors .....	1
Graduates .....	11

---

First measurements ..... 79

#### Second Measurements.

Sophomores .....	50
Juniors .....	40
Seniors .....	48
Graduates .....	2

---

Second measurements ..... 140

Total in first semester, 219.

The measurements were taken again in February and April, as follows:

In February :

First measurements.	
Freshmen .....	4
Second Measurements.	
Sophomores .....	3
Juniors .....	2
Seniors .....	1
	<hr/>
	6

In April :

Second Measurements.	
Freshmen .....	65
Sophomores .....	51
Juniors .....	37
Seniors .....	43
Graduates .....	2
	<hr/>
	198
Total in second semester .....	208
Total in both semesters.	
First measurements . . . . .	83
Second measurements . . . . .	344
	<hr/>
Total measurements, 1896-97 .....	427

Class work began November 17th, 1896, and ended with "Visitors' Day," on April 7th, 1897. In spite of the small proportion of indoor exercise required, so much voluntary time was given to prescription cards and apparatus work that as a whole the classes showed excellent gains.

The gains in "total strength" of the four classes this year as compared with the previous year are :

	1895-96.	1896-97.
Freshmen .....	30.7 kg.	55.5 kg.
Sophomore .....	29.4 kg.	30.7 kg.
Junior .....	15.3 kg.	35. kg.
Senior .....	12.7 kg.	22.2 kg.

The gains of the same classes for this year as compared with the gains made by the individuals the preceding year are :

	1895-96.	1896-97.
Class of '99 .....	30.7 kg.	30.7 kg.
Class of '98 .....	29.4 kg.	34.3 kg.
Class of '97 .....	15.3 kg.	22.2 kg.

Sophomores usually gain more than freshmen, but the class of '99 had had chiefly Swedish work as freshmen in 1895-96, while as sophomores in 1896-97 a large proportion were on apparatus work entirely, which explains both the fact that the class of '98 shows more gain in 1896-97 than does the class of '99, and the corresponding fact that the class of '98 shows more gain during the junior year than in its own sophomore year. The unusual gain of the seniors ('97), also greater than that of its own previous year, and of the preceding senior class, has been already explained as resulting from the use of chest weights as class-work, and from the interest of the class in apparatus work.

The steady progression from year to year shows well in the tables prepared in October as previously described. The class means are given in four terms, namely : capacity of lungs, called "c. l." ; total strength, called "t. s." ; total strength plus "l. c." called "t. s. l." ; the same modified by height, "t. s. l. h." They are :

	c.l.	t.s.	t.s.l.	t.s.l.h.
Freshmen .....	150	243	392	226.3
Sophomore .....	161	248.5	412.5	253.1
Junior .....	165.5	275	443.5	280.2
Senior .....	169.5	277.5	453	293.1

The highest "t. s." of any single student in each class from the autumn tests, in the last two years, are these :

College year	Class of	Gym. year 95-96	Class of	Gym. year 96-97
Freshmen . . . . .	'99	335.4	1900	342
Sophomore . . . . .	'98	361.2	'99	363
Junior . . . . .	'97	399.5	'98	375.5
Senior . . . . .	'96	395.5	'97	399.5

(One senior this year reached 425, but as she is considered an exceptional case the next highest is given.)

An elective class offered by the director on Friday afternoon grew so rapidly from week to week that it became larger than any of the regular classes, which was a gratifying sign of interest.

The attendance register has been kept by the week instead of by the month, as formerly, and the change was greatly for the better.

The new pieces of apparatus purchased this year were vaulting horse, parallel bars, and fifteen new chest-weights.

Music was reintroduced for class work, after three years' discontinuance, with general satisfaction.

Dr. Sherwood, physician of the college, kept office hours as usual on Thursdays, in the gymnasium building, and delivered the usual course of lectures on health and hygiene to the freshman class.

The fire brigades were reorganised, some of the halls retaining enough old members to need no assistance, and others being started, as last year, by the director.

The autumn tennis tournament and the spring basket ball took place as usual, and excited great enthusiasm. The spring games were played on the new athletic field, which proved well adapted for its purpose. During the winter the athletic field was flooded, as planned, for skating, and will in future prove a most attractive addition to the college winter sports.

The absolute necessity of examining all applicants for basket ball at the *beginning* of the practice was illustrated in a striking way this spring, when the rule of requiring each captain to submit a list of her candidates for approval was first enforced. Two cases of heart disease were taken off the teams, and warned against any violent exercise whatever. If these lists had been earlier presented, not only would these students have escaped risks incurred before final games, but the teams would have been saved the loss of excellent players whose position it was almost impossible to fill at the last moment. In all doubtful cases, or wherever an appeal was made, it was agreed that Dr. J. M. DaCosta, of Philadelphia, might be consulted as a heart specialist by students, and that his opinion should be given in writing to the director.

*Report of the Librarian.*

To the President: Madam,

Two thousand four hundred and thirty-two volumes have been added to the library during the year, increasing the total collection to twenty-six thousand seven hundred and thirty-two volumes. Of these additions, one thousand four hundred and forty-eight volumes were purchased from the regular appropriation, and nine hundred and eighty-four volumes were gifts to the library.

The distribution of the gifts of money for the year is as follows :

Of the \$1,000 given by Miss Mary E. Garrett, the department of mathematics received \$400 ; the department of physics \$250 ; the department of German, \$100 ; the department of chemistry, \$200 ; the department of biology, \$50.

From an anonymous gift of \$371.18, the department of German received \$50 ; English, \$100 ; Pedagogy, \$50 ; the department for reference books and periodicals, \$104 ; the department of French, \$67.18. The French department received an additional gift of \$25 through the kindness of Mr. J. G. Rosengarten.

From the Dr. James E. Rhoads Memorial Fund, created by the Trustees, the department of biblical literature received \$50.

A gift of \$225 from the Class of '93 was divided equally between the departments of history and of biology.

It becomes necessary to refer again, this year, to the crowded condition of the library, and the need for a new library building. The available shelf-room is now so nearly occupied that it is difficult to see how provision is to be made, in our present building, for future growth. The classical library of about ten thousand volumes is temporarily shelved in a class-room that is in constant use during the morning hours. Books that should be in the main library are scattered in remote seminaries. The seminary-rooms themselves are, with possibly one or two exceptions, much too small and insufficient in number to meet the needs of graduate work, two, and, in one case, three departments being

obliged to share the same seminary-room. In the main library the space is insufficient at some hours of the day and the constant going and coming between classes is a serious interruption to study. Besides the inconveniences that result from these crowded quarters, there should be considered the danger to the books, in case a fire should occur, and the possibilities of loss in a collection so widely scattered. In view of these facts, the librarian respectfully calls the attention of the President and the Trustees to the urgent need of a new library building.

Of almost equal importance is the need of an increased appropriation for the purchase of books.

In addition to the gifts of money already referred to the following gifts of books, received during the year, are herewith gratefully acknowledged :

Alabama Geological Survey : Reports and bulletins.

American Conference on International Arbitration : "Report of Conference held in Washington. 1896."

Dr. Charles M. Andrews : "Historical Development of Modern Europe," Vol. I., given by the author.

Mr. C. R. Ashbee : "Chapters in Workshop Reconstruction," given by the author.

Dr. George A. Barton : "Oriental Studies" ; papers read before the Oriental Club of Philadelphia, 1888-96 ; given by the author.

Miss Kate H. Claghorn : "College Training for Women," given by the author.

Columbia College : Cooper, "Word Formation in the Roman sermo plebeius."

Mr. Howard Comfort : 50 vols., viz.—Scott, "Diary of Samuel Scott" ; "Rules of Discipline of Philadelphia Yearly Meeting, 1877" ; Sturge & Harvey, "The West Indies in 1837" ; "Memoirs of Catharine Philips" ; "John Barclay's Letters" ; Chase, "Day by day" ; Cook, "Design of Christianity" ; Rutty, "History of Friends in Ireland" ; Corder, "Memorials of Deceased Friends" ; "Letters of Sarah Grubb" ; Wheeler, "Law of Slavery" ; Shillitoe, "Journal," 2 vols. ; Smith, "Memoir of John Dalton" ; "Memoir of Daniel Wheeler" ; Allinson,

“Memorials of Rebecca Jones” ; Senior, “American Slavery” ; Fox, “Letters and Journals of Hannah C. Backhouse” ; Knapp, “Life of Thomas Eddy” ; Tylor, “Memoirs of Elizabeth Dudley” ; Backhouse, “Memoirs of Mary Capper” ; Sewell, “History of the Quakers” ; George Fox, “Journal,” Ed. 3 ; Same, 6th (Leeds) edition ; Sarah Grubb, “Life and Letters” ; Barclay, “Apology” ; Penn, “Brief account of the rise of the people called Quakers,” 1783 ; Same, 1769 ; Phillips, “Conquest of Kansas” ; Cunningham, “The Quakers” ; Harrison, “Barclay’s Apology,” abridged ; Backhouse, “Life and correspondence of William and Alice Ellis” ; Rowntree, “Two lectures on George Fox” ; Griffith, “Journal” ; Simpson, “Memoirs of Elizabeth Fry” ; Clarkson, “Life of William Penn,” 2 vols. ; “Letters and memoirs of John Thorpe” ; “Memorials of deceased Friends in Pennsylvania, 1821” ; Leadbeater, “Biographical notices of Friends in Ireland” ; “Richard Davis” ; Gurney, “Observations on the religious peculiarities of Friends” ; Ellwood, “Davideis” ; “Memoirs of William Reckitt and James Gough” ; “Life and writings of Robert Barclay” ; Kersey, “Doctrines of the Christian religion” ; Willis, “Doctrines of the people called Quakers.”

Mr. John Beattie Crozier : History of intellectual development on the lines of modern evolution,” Vol. I., given by the author.

Cornell University Library : Fiske-Willard, “The Dante Library in Cornell University.”

Dr. Thomas Eggleston : “Life of Major-General John Paterson,” given by the author.

Gratz College, Philadelphia : Publications of the College, Vol. I.

Mrs. R. B. Haines : Journal of the Academy of Natural Sciences, Vol. 8, pts. 2-4, Vol. 9 ; Proceedings of same, 1860-75, 1877-78, 1881-92 ; Journal of the Franklin Institute, Vol. 135-139 ; University Extension, Vol. 3 ; Harper’s Magazine, 2 vols. (In all 32 vols., unbound.)

Mrs. Winfield S. Hall : “The first 500 days of a child’s life,” given by the author.

Harvard College Library : Annual reports of the Dante

Society, Nos. 2, 4, 5, 7, 9, 10, 11, 12, 13 ; W. C. Lane, "Dante collections in the Harvard College and Boston Public Libraries."

Dr. L. M. Keasbey : "The Nicaragua Canal and the Monroe doctrine," given by the author.

Mr. W. C. Lawton : "Sovereigns of France."

Mrs. H. Carvil Lewis : H. C. Lewis, "Genesis and matrix of the diamond."

Mr. Cyrus H. McCormick : Hubert, "Inventors."

Dr. Isabel Maddison, "Handbook of courses open to women in British, Continental and Canadian universities," given by the author.

Prof. O. C. Marsh : "The Dinosaurs of North America," given by the author.

Dr. D. S. Miller: Halleck, "Psychology and psychic culture."

Mr. Richard Norton : Five pamphlets on Greek art and archæology, viz.—Clarke, "The Hypæthral question" ; C. E. Norton, "The First American classical archæologist" ; Waldstein, "Ancient marbles in possession of Sir Charles Nicholson" ; Waldstein, "Influence of athletic games upon Greek art" ; Sterrett, "Leaflets from the notebook of an archæological traveller in Asia Minor."

L. Vance Phillips : "The book of the China painter," given by the author.

Miss Mary Otis Rogers : Prof. Rogers, "Geology of Pennsylvania," 2 vols. in 3, and atlas.

Mr. Robert A. Shaw : Cassella, "Diamine colours."

Mr. Anson P. Stokes : "Joint-metalism," given by the author.

Mr. John P. Woodbury : "The club of odd volumes" (pamphlet).

Mr. Ellis Yarnall : Thayer, "Washington," an oration delivered at the Academy of Music, Philadelphia, 1897 (pamphlet).

United States Government : "Smithsonian contributions to knowledge," 3 vols.; volumes of the Eleventh census ; Reports of the Commissioner of Education, 1893-6, 4 vols. and advance sheets ; Richardson's "Messages and papers of the Presidents," 3 vols. ; Department of Agriculture publications and bulletins ; Geological Survey Reports.



Philadelphia Board of Public Education : Seventy-eighth annual report, 1896.

Our thanks are again due to those libraries that have so courteously lent us books during the year ; and also to those members of our faculty who have generously placed their own books at the disposal of the students.

Respectfully submitted,

HENRIETTA R. PALMER, Librarian.

X.

*Bryn Mawr, Pennsylvania, April 27th, 1897.*

*To the honorable, the Finance Committee of the Senate :*

GENTLEMEN :

We, the Faculty of Bryn Mawr College, desire to call the attention of your honorable body to certain features of the tariff bill, known as the Dingley Bill, now under your consideration, which we believe to be detrimental to the cause of public education.

We respectfully ask that the regulations of the existing law concerning the importation of books, charts, maps, scientific apparatus, chemicals, etc., for *colleges, universities and libraries* be retained in the revised bill. We are informed that the revision agreed to by the Committee of Ways and Means of the House of Representatives does not adequately protect the interests of our educational institutions, and we therefore urgently beg that ample provision for such protection be made by your honorable body. Every year hundreds of students leave this country to visit European universities, and many do this because of the greater library and laboratory facilities to be found on the Continent, and because of the liberal manner in which these libraries and laboratories are equipped and research is fostered by the various governments. If the laboratories of research and other educational facilities of our own colleges and universities are to be made in any sense comparable with those of Europe they must have every burden removed which can possibly limit their usefulness. There can be no truer protection to American industries than this kind of protection of American colleges and of American scholars.

We beg to call your attention to another provision of the proposed tariff bill which will injuriously affect *American scholars*. The existing tariff permits the free importation of books in foreign languages, and also those in English, published more than twenty years ago. This provision has proved most helpful

to those teachers and scholars who are obliged to make use of foreign books in their work. The greater number of these books are never translated into English at all, because being of interest only to specialists they do not warrant an American publisher in undertaking the expense of reproduction ; while such as are translated appear in that form only after so long an interval that their usefulness to teachers is materially lessened. American scholars in many subjects are obliged to get these books as soon as published, in order to keep informed as to the progress of investigation in their own departments. The great bulk of such scholars are poor men, and a tariff on foreign books is for them a grievous burden, which is at the same time quite unnecessary, inasmuch as these books do not come into competition with those published in this country, and consequently no American interest is prejudiced. Indeed, foreign books of the class described not merely do not come into competition with American publications, but assist them in two ways : first, the scholar who needs foreign books to keep abreast of the times needs domestic ones as well, and our experience is that he is as careful to provide himself with all American books of value as he is with foreign; secondly, foreign books act as a stimulus to the production of independent work in this country. It has been a matter of congratulation to observe the increasing number of American publications in educational and scientific subjects that have been issuing from the American press in the last few years. It is strictly within the limits of accuracy to affirm that the authors of the vast majority of these have had to take account of the recent work done in foreign lands in their subjects. To render it difficult to become familiar with the work of foreign scholars is to restrict American production, and thus go contrary to the very principle of protection which the Dingley Bill is intended to foster.

Secondly, the importation of old books is a matter of the utmost importance and deserves every possible encouragement. There are gradually growing up in this country libraries, both public and private, of considerable size and value. These collections of books will in time become such as to make us relatively independent of European libraries, and their increase de-

serves to be furthered in every possible way. All the private collections will in time be scattered to form new private libraries or will be absorbed into the larger public libraries. No such collection can be sold for anything like the cost of making it, so that these private libraries are practically never a source of profit to their owners. The proposed tariff on books, old and new, will make the expense of extending these collections greater than most owners can bear.

We therefore respectfully, but urgently, ask that such restrictions upon the usefulness of our colleges and universities, and upon the full development of American scholarship, may be removed by your honorable body.

Signed on behalf of the Faculty of Bryn Mawr College,

M. CAREY THOMAS, President.

GONZALEZ LODGE, Secretary of the Faculty.

ANNUAL REPORT  
OF  
THE PRESIDENT  
OF  
BRYN MAWR COLLEGE,  
1897-98.

---

PHILADELPHIA :  
ALFRED J. FERRIS, PRINTER, 29 NORTH SEVENTH STREET.  
1899.

## BOARD OF TRUSTEES.

PHILIP C. GARRETT,  
*President.*

HENRY TATNALL,  
*Treasurer.*

EDWARD BETTLE, JR.,  
*Secretary.*

JOHN B. GARRETT, Rosemont, Pa.	HOWARD COMFORT, Philadelphia.
CHARLES HARTSHORNE, Philadelphia.	JUSTUS C. STRAWBRIDGE, Philadelphia.
DAVID SCULL, Philadelphia.	THOMAS SCATTERGOOD, Philadelphia.
ALBERT K. SMILEY, Lake Mohonk, N. Y.	HENRY TATNALL, Philadelphia.
PHILIP C. GARRETT, Philadelphia.	JAMES WOOD, Mt. Kisco, New York.
EDWARD BETTLE, JR., Philadelphia.	ALEXANDER C. WOOD, Cinnaminson, N. J.
RUFUS M. JONES, Haverford, Pa.	

## EXECUTIVE COMMITTEE.

HOWARD COMFORT,	ALEXANDER C. WOOD,
EDWARD BETTLE, JR.,	THOMAS SCATTERGOOD,
JOHN B. GARRETT.	

## COMMITTEE ON BUILDINGS AND GROUNDS.

DAVID SCULL,	HENRY TATNALL,
JUSTUS C. STRAWBRIDGE,	JAMES WOOD.

## FINANCE COMMITTEE.

JOHN B. GARRETT,	JUSTUS C. STRAWBRIDGE,
THOMAS SCATTERGOOD.	

## LIBRARY COMMITTEE.

EDWARD BETTLE, JR.,	HOWARD COMFORT,
JAMES WOOD.	

## RELIGIOUS LIFE COMMITTEE.

DAVID SCULL,	JOHN B. GARRETT,
JAMES WOOD.	

## ACADEMIC APPOINTMENTS.

**M. CAREY THOMAS, PH.D., LL.D.,** *President of the College and Professor of English.*

A.B., Cornell University, 1877; studied at the Johns Hopkins University, 1877-78; University of Leipsic, 1879-82; Ph.D., University of Zürich, 1882; Sorbonne, and Collège de France, 1883; Dean of the Faculty of Bryn Mawr College and Professor of English, 1885-94.

**CHARLOTTE ANGAS SCOTT, D.Sc.,** *Professor of Mathematics.*

Lincoln, England. Graduate in Honors, Girton College, University of Cambridge, England, 1880; B.Sc., University of London, 1882; Lecturer on Mathematics in Girton College, 1880-84; lectured in connection with Newnham College, University of Cambridge, England, 1880-83; D.Sc., University of London, 1885.

**EDWARD H. KEISER, PH.D.,** *Professor of Chemistry.*

S.B., Swarthmore College, 1880; Assistant in Chemistry, Swarthmore College, 1880-81; S.M., Swarthmore College, 1881; Fellow in Chemistry, Johns Hopkins University, 1882-84; Ph.D., Johns Hopkins University, 1884; Student at the Royal School of Mines, Freiberg, Saxony, 1884; Assistant in Chemistry, Johns Hopkins University, 1884-85.

**HERMANN COLLITZ, PH.D.,** *Professor of Comparative Philology and German.*

Bleekede, Hanover, Germany. University of Göttingen, 1875-78; University of Berlin, 1878-81; Ph.D., University of Göttingen, 1878; Privatdocent in the University of Halle, 1885-86.

**JAMES HARKNESS, A.M. (Cambridge and London),** *Professor of Mathematics.*

Derby, England. Major Scholar, Trinity College, University of Cambridge, England, 1882; Graduate in Honors (8th Wrangler) in the Cambridge Mathematical Tripos, 1885; Mathematical Exhibitioner, London University Intermediate Arts Examination, 1885; Mathematical Scholar, London University B.A. Examination, 1887.

**HERBERT WEIR SMYTH, PH.D.,** *Professor of Greek.*

A.B., Swarthmore College, 1876, and Harvard University, 1878; University of Leipsic, 1879-81; University of Göttingen, 1881-83; Instructor in Classics and Sanskrit, Williams College, 1883-85; Ph.D., University of Göttingen, 1884; Fellow by Courtesy and Lecturer on Greek, Johns Hopkins University, 1885-87; Reader in Greek Literature, Johns Hopkins University, 1887-88.

**MARY GWINN, PH.D.,** *Professor of English.*

Studied at the University of Leipsic, 1879-82; University of Zürich, 1882; Sorbonne and Collège de France, 1883; Fellow in English, Bryn Mawr College, 1885-87, and Graduate Student, 1887-88; Ph.D., Bryn Mawr College, 1888.

**CHARLES MCLEAN ANDREWS, PH.D.,** *Professor of History.*

A.B., Trinity College, 1884; Fellow in Johns Hopkins University, 1888-89; Ph.D., Johns Hopkins University, 1889.

**GONZALEZ LODGE, PH.D.,** *Professor of Latin.*

A.B., Johns Hopkins University, 1883; Graduate Scholar and Fellow, Johns Hopkins University, 1883-86; Ph.D., Johns Hopkins University, 1886; Professor of Greek, Davidson College, 1886-88; American School of Classical Studies, Athens, 1888-89; University of Bonn, 1889.

**GEORGE A. BARTON, PH.D.,** *Associate Professor of Biblical Literature and Semitic Languages.*

A.B., Haverford College, 1882, and A.M., 1885; studied under the direction of the American Institute of Hebrew, 1885-86; Harvard University, 1888-91; Thayer Scholar, Harvard University, 1889-91; A.M., Harvard University, 1890; Ph.D., Harvard University, 1891.

**JOSEPH AUGUSTE FONTAINE, PH.D.,** *Professor of Romance Languages.*

College of Sion, Nancy, France, 1879; Paris, 1880-81; Johns Hopkins University, 1882-86; Ph.D., Johns Hopkins University, 1886; Collège de France, Sorbonne, Ecole des Hautes Etudes, Ecole des Chartes, University of Bonn, 1886-87; Instructor, University of Nebraska, 1887-89; Professor of Modern Languages, University of Mississippi, 1889-91.

**ARTHUR STANLEY MACKENZIE, PH.D.,** *Professor of Physics.*

A.B., Dalhousie University, 1885; Tutor in Mathematics, Dalhousie University, 1887-89; Fellow, Johns Hopkins University, 1890-91; Ph.D., Johns Hopkins University, 1894.

JAMES DOUGLAS BRUCE, PH.D., *Associate Professor of English Philology.*

A.M., University of Virginia, 1883; University of Berlin, 1886-88; University of Strassburg, 1888; Johns Hopkins University, 1889-90; Professor of Modern Languages, Centre College, 1890-91; Ph.D., Johns Hopkins University, 1894.

THOMAS HUNT MORGAN, PH.D., *Professor of Biology.*

B.S., State College, Kentucky, 1886, and M.S., 1888; Graduate Scholar, Johns Hopkins University, 1888-89; Fellow in Biology, Johns Hopkins University, 1889-90; Ph.D., Johns Hopkins University, 1890; Adam T. Bruce Fellow, Johns Hopkins University, 1890-91.

JOSEPH W. WARREN, M.D., *Associate Professor of Physiology.*

A.B., Harvard College, 1871; University of Berlin, 1871-72; University of Leipsic, 1872-73; University of Bonn, 1873-79; M.D., University of Bonn, 1880; Assistant and Instructor in Physiology, Harvard Medical School, 1881-91; Lecturer in Medical Department of the University of the City of New York, 1885-86; Lecturer in Physiology, University of Michigan, 1889.

ELMER P. KOHLER, PH.D., *Associate Professor of Chemistry.*

A.B., Muhlenberg College, 1886, and A.M., 1889; Johns Hopkins University, 1889-91; Fellow in Chemistry, Johns Hopkins University, 1891-92; Ph.D., Johns Hopkins University, 1892.

EDGAR BUCKINGHAM, PH.D., *Associate Professor of Physics and Physical Chemistry.*

A.B., Harvard University, 1887; Assistant in Physics, Harvard University, 1888-89; Assistant in Physics, University of Strassburg, 1889-90; University of Leipsic, 1890-91; Assistant in Physics, Harvard University, 1891-92; Tyndall Scholar of Harvard University, University of Leipsic, 1892-93; Ph.D., University of Leipsic, 1893.

LINDLEY MILLER KEASBEY, PH.D., R.P.D., *Associate Professor of Political Science.*

A.B., Harvard University, 1888; A.M., Columbia College, 1889; Ph.D., Columbia College, 1890; University of Berlin, 1890-91; University of Strassburg, 1891-92; *Rerum Politicarum Doctor*, University of Strassburg, 1892; Assistant in Economics, Columbia College, and Lecturer on Political Science, Barnard College, 1892; Professor of History, Economics and Political Science, State University of Colorado, 1892-94.

LOUIS EMIL MENDER, PH.D., *Associate Professor of Romance Philology.*

A.B., Mississippi College, 1888, and A.M., 1890; Professor of Latin and German, Mary Le Grand Institute, Vicksburg, Miss., 1888-90; Fellow in Romance Languages, Johns Hopkins University, 1892-93; Ph.D., Johns Hopkins University, 1893; Instructor in Romance Languages, Johns Hopkins University, 1893-94; Associate in Romance Languages, Johns Hopkins University, 1894-97.

FONGER DE HAAN, PH.D., *Associate in Spanish.*

Leeuwarden, Holland. Instructor in Modern Languages, Lehigh University, 1885-91; Fellow in Romance Languages, Johns Hopkins University, 1893-94; Assistant in Romance Languages, Johns Hopkins University, 1893-95; Ph.D., Johns Hopkins University, 1895; Instructor in Romance Languages, Johns Hopkins University, 1895-96; Associate in Romance Languages, Johns Hopkins University, 1896-97.

JAMES H. LEUBA, PH.D., *Associate in Psychology and Pedagogy.*

B.S., Neuchatel, Switzerland, 1886; Ph.D., Ursinus College, 1888; Scholar in Psychology, Clark University, 1892-93; Fellow in Psychology, Clark University, 1893-95; Ph.D., Clark University, 1896.

FLORENCE BASCOM, PH.D., *Associate in Geology.*

A.B., University of Wisconsin, 1882, B.Sc., 1884, and A.M., 1887; Johns Hopkins University, 1891-93; Ph.D., Johns Hopkins University, 1893; Assistant in Geology and Instructor in Petrography, Ohio State University, 1893-95.

CHARLES MONTAGUE BAKEWELL, PH.D., *Associate Professor of Philosophy.*

A.B., University of California, 1889, and A.M., 1891; Thayer Scholar, Harvard University, 1891-92; A.M., Harvard University, 1892, and Ph.D., 1894; Walker Fellow of Harvard University, Universities of Berlin and Strassburg, 1894-95; John Harvard Fellow of Harvard University, University of Paris, 1895-96; Instructor in Philosophy, Harvard University, 1896-97; Instructor in Philosophy, University of California, 1897-98.

WILLIAM ALLAN NEILSON, PH.D., *Associate in English Literature.*

Doune, Scotland. Holder of MacDougall Bursary, University of Edinburgh, 1887-90, and A.M., 1891; Dickson Travelling Fellow, University of Edinburgh, 1891; English Master, Upper Canada College, Toronto, Ont., 1891-95; A.M., Harvard University, 1896; University Scholar, Harvard University, 1896-97; Morgan Fellow, Harvard University, 1897-98; Ph.D., Harvard University, 1898.



ALBERT HAAS, PH.D., *Associate in German Literature.*

Herzberg, Schweinitz, Prussia. University of Berlin, 1891-92, and 1893-95; University of Geneva, 1892; Ph.D., University of Berlin, 1895; Sorbonne and University of Bonn, 1896; University of Freiburg, 1897.

GORDON J. LAING, PH.D., *Lecturer in Latin.*

A.B., University of Toronto, 1891; Acting Lecturer in Greek and Latin, University of Toronto, 1893-94; Scholar and Fellow in Latin, Johns Hopkins University, 1895-96; Ph.D., Johns Hopkins University, 1896; Fellow in the American School of Classical Studies in Rome, 1896-97.

JOHN HOMER HUDDILSTON, PH.D., *Lecturer in Archæology.*

A.B., Baldwin University, 1890, and A.M., 1892; Instructor in Latin and Greek, Baldwin University, 1890-92; A.B., Harvard University, 1893; Instructor in Greek, Northwestern University, 1893-95; University of Berlin, 1895-97; University of Munich, 1897-98; Ph.D., University of Munich, 1897.

ROSE CHAMBERLIN, *Reader in German and French.*

Great Yarmouth, England. Graduate in Honors, Newnham College, University of Cambridge, England, 1886 (Medieval and Modern Languages Tripos, First Class).

HARRIET RANDOLPH, PH.D., *Demonstrator in Biology and Reader in Botany.*

A.B., Bryn Mawr College, 1889; Fellow in Biology, Bryn Mawr College, 1889-90; University of Zürich, 1890-92; Ph.D., University of Zürich, 1892.

LUCY MARTIN DONNELLY, A.B.,\* *Reader in English.*

A.B., Bryn Mawr College, 1893; University of Oxford, England, and University of Leipsic, 1893-94; Sorbonne and Collège de France, and University of Leipsic, 1894-95.

HELEN WHITALL THOMAS, A.B., *Reader in English.*

A.B., Bryn Mawr College, 1893; University of Leipsic, Second Semester, 1893-94; Sorbonne and Collège de France, and University of Leipsic, 1894-95; Bryn Mawr College, 1895-96.

WILMER CAVE FRANCE, PH.D., *Reader in Classical Literature.*

Tysley, Worcestershire, England. Mason College, Birmingham, England, 1885-87; Girton College, University of Cambridge, England, 1888-92; Classical Tripos, 1892; Fellow in Greek, Bryn Mawr College, 1892-93; Fellow in Latin, University of Chicago, 1893-94, and Fellow in Greek, 1894-95; Ph.D., University of Chicago, 1895; Reader in Greek and Latin, University of Chicago, 1895-96.

LAURETTE EUSTIS POTTS, A.B., *Reader in English.*

A.B., Bryn Mawr College, 1897; Mistress of Pembroke Hall East, Bryn Mawr College, 1895-96; Sorbonne and Collège de France, 1896-97.

HELEN STRONG HOYT, A.M., *Reader in English.*

A.B., Bryn Mawr College, 1897, and A.M., 1898; Bryn Mawr College, 1897-98.

EDITH PETTIT, A.M., *Reader in English.*

A.B., Bryn Mawr College, 1895, and A.M., 1898; Sorbonne and Collège de France, 1896-97; Bryn Mawr College, 1897-98.

LOUISA SMITH, M.D., *Director of the Gymnasium.*

Graduate of the Anderson Normal School of Gymnastics, 1895; Special Course in Medical Gymnastics, Anderson Normal School of Gymnastics, 1895; Assistant Teacher in the Summer School of Physical Education, Cornell University, 1895; M.D., Syracuse University, 1898; Assistant Teacher in Chautauqua School of Physical Education, 1898.

MARY SCATTERGOOD MACOMBER, *Assistant in the Gymnasium.*

Graduate of Dr. Sargent's Normal School of Gymnastics, 1897; Harvard Summer School of Physical Training, 1897; Gilbert's Summer Normal School of Esthetic Calisthenics, 1898; Assistant Teacher in Dr. Sargent's Normal School of Gymnastics, and Director of Women's Classes at Newton Y. M. C. A., 1897-98.

MARY SHERWOOD, A.B., M.D., *Lecturer on Hygiene and Physician of the College.*

A.B., Vassar College, 1883; M.D., University of Zürich, 1890; Lecturer in Pathology, Woman's Medical College of Philadelphia, 1891-96.

ISABEL ELY LORD, B.L.S., *Librarian.*

B.L.S., New York State Library School, 1897.

---

\* Granted leave of absence for the year 1898-99.

FLORENCE BAYARD KANE, *Assistant Librarian.*

Graduate, Library School of Drexel Institute, 1898.

ISABEL MADDISON, B.Sc., Ph.D., *Secretary to the President and Reader in Mathematics.*

B.Sc., University of London, 1893, and Ph.D., Bryn Mawr College, 1896; Graduate Student in Mathematics, Bryn Mawr College, 1892-93, and Fellow in Mathematics, 1893-94; Holder of the Mary E. Garrett European Fellowship and Student in Mathematics, University of Göttingen, 1894-95.

FRANCES LOWATER, *Secretary of the College.*

Nottingham, England. University College, Nottingham, 1888-91, and 1892-93; Newnham College, University of Cambridge, England, 1891-92; Demonstrator in Physics, Bryn Mawr College, 1893-96, 1897-98, and Fellow in Physics, 1896-97.

ELIZABETH NIELDS, A.B., *Recording Secretary.*

A.B., Bryn Mawr College, 1898.

FREDERIKA M. KERR, *Bursar.*

ANNA BELL LAWTHORP, A.B., *Assistant Bursar.*

A.B., Bryn Mawr College, 1897.

M. IDA A. GARBER, *Junior Bursar.*

## THIRTEENTH ANNUAL REPORT.

### *To the Board of Trustees:*

The President of the College respectfully submits the following report for the thirteenth academic year, extending from October 1st, 1897, to September 30th, 1898.

The sudden death of Dr. James Carey Thomas, of Baltimore, on the 11th of last November, in the sixty-second year of his age, was deeply felt by all the members of our college community. Dr. Thomas was one of the original trustees appointed by the Founder of the College, and had served as a member of the Executive Committee from the opening of the college until his death. Like the first president of the Board of Trustees, Mr. Francis T. King, Dr. Thomas had been a trustee of the Johns Hopkins University from its beginning, and was at the time of his death chairman of the Executive Committee of the Board. The experience gained by Mr. King and Dr. Thomas in the Johns Hopkins University was of much service in the early organisation of Bryn Mawr College, and assisted materially in establishing the college on its present basis of broad and liberal scholarship. Although his home was in Baltimore, Dr. Thomas was accustomed to attend all the special and regular meetings of the trustees, and his frequent visits to the President of the College made him personally known to many of the faculty and students, in whom he took a warm personal interest. It was always his habit to say a few words at morning chapel; indeed, the last words he spoke in public were addressed to the students of the college on the morning after the annual meeting of the trustees. The resolutions appended to this report, passed by the Faculty of the College, the Association of the Alumnae of Bryn Mawr College, and the Graduate Students' Club,

show that the interest felt by Dr. Thomas in the moral and intellectual life of the college was recognised and appreciated. It is difficult for the President of the College adequately to express her gratitude for the kindness and sympathy shown her during the past year by the trustees, faculty, and students.

The president's report for 1894-95 referred to the thought given by the trustees and the president of the college to the reorganisation of the teaching of Greek and Latin. As the results are still not entirely satisfactory, Professor Herbert Weir Smyth has consented to bring the teaching of Greek into accord with that of the other group work of the college by taking part in the first and second year of the group work. It has always been regarded as an important feature of our teaching that every member of the faculty, especially the senior members of the faculty, should conduct undergraduate as well as graduate classes, thus affording the undergraduate students an opportunity to come in contact with the heads of departments, while on the other hand keeping the graduate work of the college in close touch with the undergraduate work. Our experience shows that this system has great advantages both for graduate and undergraduate instruction. Professor Smyth will take the work in the minor and major which has been given for the past three years by Dr. Mortimer Lamson Earle.

The experiment of dividing the Greek and Latin work, which was tried for the first time last year, has worked so well that the trustees have reappointed Dr. Gordon J. Laing Lecturer in Latin, and Dr. Wilmer Cave France Reader in Greek Literature. Dr. France will repeat the courses in Homer and Greek Literature, and will offer a post-major course in Plato and a course in Elementary Greek.

The lectures in the history of art were intermitted last year on account of the absence of Mr. Richard Norton, who had been granted leave of absence in order to accept the professorship of archæology in the American School of Classical Studies in Rome. At the close of the year Mr. Norton decided to remain in Rome, and the trustees created a temporary lectureship in the history of art, pending the establishment of an associateship in art in the following year. Dr. John Homer Huddilston was accordingly appointed Non-Resident Lecturer in Archæology for one year. Dr. Huddilston has received the degree of Bachelor of Arts and Master of Arts from Baldwin University, the degree of Bachelor of Arts from Harvard University, and the degree of Doctor of Philosophy from the University of Munich, where he studied for three years under Professor Furtwängler, the well-known professor of art. Dr. Huddilston will offer courses in Greek Sculpture and Greek Ceramics. The great interest taken by the students in this subject shows clearly the need of the endowment of a chair in the history of art.

There were two changes in the English department. Dr. Alfred Hodder, who had held the post of Lecturer in English for one year and Associate in English for two years, was not a candidate for reappointment, and the trustees appointed in his stead Dr. William Allan Neilson. Dr. Neilson was born in Scotland, and has received the degree of Bachelor of Arts from the University of Edinburgh, and the degrees of Master of Arts and Doctor of Philosophy from Harvard University. He has held the Dickson Travelling Fellowship of the University of Edinburgh, and both a University Scholarship and the Morgan Fellowship in Harvard University, and has been for four years English Master in Upper Canada College, in

Toronto, Ontario. In addition to the work offered by Dr. Hodder, Dr. Neilson will deliver the lectures in General English Literature, hitherto delivered by the President of the College. Owing to the increasing work connected with the administration of the college, it has proved necessary for the president to give up these lectures, at least for the present. Miss Abby Kirk, who has been connected with the essay department as Reader in English since 1892, was not a candidate for reappointment, and Miss Helen Strong Hoyt was appointed Reader in English. Miss Hoyt was the George W. Childs Prize Essayist of her year, and has received the degrees of Bachelor of Arts and Master of Arts from Bryn Mawr College.

Much time and attention has been given during the past year to the subject of English essay work. Two hours a week for two years is required for the bachelor's degree, and various experiments have been tried in order to find out what methods would produce the best result in the given time. Miss Donnelly and Miss Helen W. Thomas, the senior Readers in English, have been in frequent consultation with Professor Gwinn, the head of the essay department, and important changes will be made in the essay work for next year. A need for advanced work in the writing of English from the point of view of English style, which has been felt for some time, has been met during the past year by a two-hour elective course in descriptive essay writing, offered by Miss Donnelly and Miss Helen W. Thomas. It is hoped that this will become a permanent part of the essay work of the college.

In the department of Teutonic languages Dr. Max F. Blau, Associate in German Literature, was not a candidate for reappointment, having accepted the chair in German in Adelphi College, and the trustees appointed in his stead

Dr. Albert Haas. Dr. Haas was born in Prussia, and has studied at the Universities of Berlin, Geneva, Bonn, Freiburg, and Paris. He has received the degree of Doctor of Philosophy from the University of Berlin. Although Dr. Haas is now resident in Berlin, and has never been in England or America, his knowledge of English is said to be excellent. He speaks French as well as English, and his knowledge of French Literature is almost as wide as his knowledge of German Literature.

Dr. Fonger DeHaan and Dr. James H. Leuba will return in the autumn from their year of absence to take the places of Dr. Frederic M. Page, Instructor in the University of Pennsylvania, and Dr. Lightner Witmer, Associate Professor in the University of Pennsylvania, who have been temporarily teaching classes in Spanish and Experimental Psychology. Our sincere thanks are due to Dr. Page and Dr. Witmer for their kindness in relieving the college from embarrassment during the absence of the heads of the departments concerned. Notwithstanding his many engagements, Dr. Witmer spent much more time than was required for the lectures in testing the students in the psychological laboratory in various ways, and tabulating the results obtained. He also gave much personal attention to the work and reading of advanced students.

Dr. Dickinson Sergeant Miller, Associate in Philosophy, was not a candidate for reappointment, and the trustees created an associate professorship in philosophy, and called to the chair Dr. Charles Montague Bakewell. Dr. Bakewell has received the degrees of Bachelor of Arts and Master of Arts from the University of California, and the degree of Master of Arts and Doctor of Philosophy from Harvard University. He has studied in the University of

Paris, has held successively the Thayer Scholarship, the Walker Fellowship and the John Harvard Fellowship of Harvard University, and has been for one year Instructor in Philosophy in the University of California, resigning this instructorship to accept the appointment of the trustees.

Miss Henrietta R. Palmer, who has held the post of acting librarian for one year, of associate librarian for two years, and of librarian for three years, and has been granted leave of absence for the past year on account of health, resigned her post for this reason. Miss Madeline Vaughan Abbott, who has held the secretaryship to the dean for one year, and the secretaryship of the college for four years, was not a candidate for reappointment, having accepted the associate editorship of the "Literary World." Both these resignations were accepted with great regret. Miss Isabel Ely Lord was appointed Librarian. Miss Lord has received the degree of Bachelor of Library Science from the New York State Library School, and has acted as substitute for Miss Palmer during the past year. Miss Frances Lowater, who has held the fellowship in physics and the demonstratorship in physics for the past four years, was appointed secretary of the college for one year, accepting the post in order to relieve the college from embarrassment, and Miss Mary Helen Ritchie was appointed secretary of the college for the year 1899-1900. Miss Ritchie has received the degrees of Bachelor of Arts and Master of Arts from Bryn Mawr College, has been a member of the graduate school for two years, and has been awarded by the trustees the fellowship in Latin for the year 1898-99.

Dr. Louisa Smith was appointed Director of the Gymnasium in place of Dr. Alice Bertha Foster. Dr. Smith



is a graduate of the Anderson Normal School of Gymnastics, has received the degree of Doctor of Medicine from Syracuse University, and has been Assistant Teacher in the Summer School of Physical Education of Cornell University, and Assistant Teacher in the Chautauqua School of Physical Education.

An important change in the management of the halls of residence was decided on for next year. The trustees created the position of junior bursar, or buyer, and Miss M. Ida A. Garber, who has been for five years Mistress of Pembroke, was appointed to the post. Hereafter all the provisions for the halls of residence will be bought by the junior bursar, and a common bill of fare will be put into effect in all the halls of residence. It is hoped that by this means the standard of the hall tables may be raised without too great an increase in the cost.

The annual Conferring of Degrees took place on June 7th, the address being delivered by the Hon. George F. Hoar, Senator from Massachusetts. A list of the degrees conferred and of the fellowships and scholarships awarded for the year 1897-98 will be found in the second and third appendices to this report.

A full list of the clergymen who have been invited by the trustees to preach before the students during the past year and of the speakers who have addressed either the college as a whole or the various students' clubs or associations will be found in the fourth and fifth appendices.

The autumn reception was intermitted by the vote of the Graduate Club and the Undergraduate Association, the money usually appropriated by the Board of Trustees for the purpose being divided between the two students' asso-

ciations to be used as a lecture fund. The spring reception was held as usual in the central dining room and reception rooms of Pembroke East and Pembroke West.

The entire number of students enrolled during the year was 324. There were 49 graduate students, including fellows. The number of graduates was nearly 15 per cent. of the whole number of students. Of the undergraduates 264 were candidates for a degree and 11 were hearers. There were 296 students resident in the college halls and 28 non-resident.

The 275 undergraduate students enrolled during the past year may be classified according to states and countries, as follows: Maine, 2; New Hampshire, 1; Massachusetts, 31; Rhode Island, 5; Connecticut, 7; New York, 41; New Jersey, 15; Delaware, 2; Pennsylvania, 100; Maryland, 17; District of Columbia, 5; Virginia, 4; West Virginia, 1; North Carolina, 1; Georgia, 1; Alabama, 1; Kentucky, 4; Tennessee, 1; Ohio, 5; Indiana, 4; Illinois, 6; Iowa, 1; Arizona, 1; Oregon, 3; Missouri, 4; Texas, 1; Nebraska, 1; Kansas, 1; Colorado, 1; Utah, 1; Michigan, 5; France, 1; Japan, 1.

The 49 graduate students enrolled during the year may be classified as follows: Vermont, 1; Massachusetts, 3; Connecticut, 1; New York, 4; Pennsylvania, 16; Delaware, 1; Maryland, 3; Virginia, 2; North Carolina, 2; Ohio, 4; Indiana, 2; Illinois, 1; Iowa, 2; Kansas, 1; Missouri, 1; Wisconsin, 1; California, 1; Canada, 1; England, 2.

The distribution of the students among the several departments was as follows: Sanskrit and Comparative Philology, 2; Greek, 56; Latin, 104; English Literature, 194; Anglo-Saxon, 5; German, 66; Teutonic Philology, 1; French, 70; Romance Philology, 4; Italian, 18; Spanish, 4; Semitic Languages and Biblical Literature, 17; History, 80; Political Science, 84; Philosophy, 85; History of Edu-

cation and Pedagogy, 21; Mathematics, 48; Physics, 26; Chemistry, 35; Geology, 17; Biology, 69.

The entering class numbered 88. Out of these, 28 passed the entrance examinations without conditions; 20 with one-half condition; 13 with one condition; 5 with one and one-half conditions; 5 with two conditions; 3 with two and one-half conditions; 8 with three conditions; 3 with three and one-half conditions; 2 with four conditions; and 1 was admitted on certificate of honorable dismissal from another college. Thirty-five had already decided on their group studies, as follows:—Greek and Latin, 11; Greek and English, 3; Greek and French, 1; Greek and Mathematics, 3; Latin and English, 1; Latin and German, 1; Latin and French, 2; English and French, 3; History and Political Science, 4; Mathematics and Physics, 3; Chemistry and Biology, 2; Chemistry and Biology as a course preliminary to the study of medicine, 1. The average age of the eighty-eight freshmen was 18.9 years; the median age, 18.75 years. They were prepared in the following schools, arranged by sections of the country to accord with the matriculation scholarships offered by the trustees:—*New England States*: Miss Baker's School, Brookline, Mass.; Brunswick High School, Brunswick, Me.; Cambridge School for Girls, Cambridge, Mass.; Miss Curtis and Miss Peabody's School, Boston, Mass.; B. M. C. Durfee High School, Fall River, Mass.; Girls' Latin School, Boston, Mass.; Hillhouse High School, New Haven, Conn.; Plymouth High School, Plymouth, Mass.; Rogers High School, Newport, R. I.; Miss Winsor's School, Boston, Mass. *New York, New Jersey and Delaware*: Brearley School, New York city; Lyndon Hall School, Poughkeepsie, N. Y.; Oakwood Seminary, Union Springs, N. Y.; Packer Collegiate Institute, Brooklyn, N. Y.; Dr. Sachs's School for Girls, New York city;

Utica Free Academy, Utica, N. Y.; Dearborn-Morgan School, Orange, N. J.; Dwight School for Girls, Englewood, N. J.; Trenton Model School, Trenton, N. J. *Western States*: Miss Armstrong's School, Cincinnati, O.; Detroit Seminary, Detroit, Mich.; Lansing High School, Lansing, Mich.; Oberlin Academy, Oberlin, O.; Portland Academy, Portland, Ore.; Mrs. P. B. Semple's School, Cincinnati, O.; University School of Kentucky. *Middle and Southern States*: Miss Florence Baldwin's School, Bryn Mawr, Pa.; Miss Case and Miss Hallowell's School, Philadelphia, Pa.; Friends' Select School, Philadelphia, Pa.; Girls' High School, Philadelphia, Pa.; Miss Irwin's School, Philadelphia, Pa.; Lower Merion High School, Ardmore, Pa.; Radnor High School, Radnor, Pa.; Miss Sergeant and Miss Bent's School, Harrisburg, Pa.; Misses Shipley's School, Bryn Mawr, Pa.; Miss Mary E. Stevens's School, Germantown, Philadelphia, Pa.; Walton-Wellesley School, Philadelphia, Pa.; Miss Wilcox and Miss Hills's School, Philadelphia, Pa.; Miss Woodward's Seminary, Harrisburg, Pa.; Bryn Mawr School, Baltimore, Md.; Randolph-Macon Woman's College, Lynchburg, Va.; St. Timothy's School, Catonsville, Md.; Woman's College, of Baltimore, Baltimore, Md. (special course); prepared by private tutor, 1; certificate of honorable dismissal from another college of acknowledged standing, 1.

A comparison of the above figures with those of the year 1896-97 shows that there has been an increase of thirty-five students over the number studying in the college last year, and that there has also been a slight increase in the graduate department. This fact is noteworthy because, on account of the war with Spain, some colleges in the United States did not increase at all, and some lost students in their graduate departments.

'The summer was spent as usual in repairing and reno-

vating the college buildings. The woodwork of Dalton Hall received a third coat of paint, and, for the first time, the woodwork of the large windows, where, on account of the expense, wood had been used instead of stone, was painted the colour of the stonework in the small windows, to the great improvement of the appearance of Dalton Hall as a whole. Part of the inside shutters and woodwork of Taylor Hall and Merion Hall was refinished.

In order to provide accommodation for additional students, it was decided by the trustees that hereafter students only should be allowed to engage rooms in the halls of residence, and nine of the women instructors who had always lived in the halls of residence accordingly gave up their rooms. In view of this decision it occurred to the president of the college that the erection of an apartment house to accommodate the women of the college staff would appeal strongly to the friends of the college. The trustees cordially approved of the plan, and in June, 1898, a sufficient number of subscriptions was secured and the house known as Low Buildings was begun. As it will not be finished until late in the autumn of 1898, a description of the building will be given in the president's report for 1898-99.

The trustees also decided to open for students the cottage called Dolgelly, which had been used in the preceding year as a boarding house for some of the women of the college staff and for visitors. The water tank, now useless because all college buildings are connected with the mains of the Springfield Water Company, was removed in order to provide an additional servants' room, and two new windows were cut in the roof.

In connection with Dolgelly it was also decided to use the adjoining house, Cartref, built originally for the first president of the college, but since his death rented to his widow.

The house was completely furnished. A new furnace was put in, and many minor changes were made, so as to accommodate as many students as possible.

Extensive alterations were made in the third floor of Pembroke East in order to provide a much needed nursery for Pembroke East and two new servants' rooms. In addition to the isolated Infirmary, to which all cases of infectious diseases are at once removed, there is now in every hall of residence, including each of the two wings of Pembroke, a nursery, where a student temporarily indisposed may be taken care of for a few days.

In the summer of 1897 the fourth floor of Dalton Hall had been fitted up for geology, and at that time it seemed impossible to find room in the building for another scientific laboratory, but the opening by the trustees of the new department of experimental psychology made it necessary to provide for laboratories and lecture rooms in this subject. After a careful examination of every building it was found that the attic of Dalton Hall had not been finished when the hall was built and might be utilised for the purpose. During the summer of 1898 the Committee on Buildings and Grounds made the necessary changes. Excellent light was secured by letting into the roof three large skylights; a staircase and firescape were run to the fifth floor, and the space thus obtained was made into a beginners' laboratory, an advanced laboratory, and a professors' room for experimental psychology. It is evident that a new wing must be added to Dalton Hall if provision is to be made for the future growth of our scientific departments. At present there is no place for a natural history museum, the rooms originally assigned for this having been used for geology. The college would in all probability receive many gifts if the trustees were able to provide a well lighted museum in which they could be displayed to advantage.

The gymnasium is the only building on the college grounds that can be used by the students for their entertainments, and is now much too small to accommodate our college audience. At such times the running track, which forms a kind of gallery, is crowded with double rows of spectators, and is thus put to a use for which it was not intended. During the past year it was feared that the supports of the gallery were not strong enough to stand the strain and the gallery throughout its entire length was strengthened by iron supports placed at irregular intervals. It is much to be desired that there should be a separate students' building, as the gymnastic work is seriously interfered with by the gymnasium's serving this double purpose.

During the past summer a great deal of work was done on the skating pond, both by the contractor to comply with the terms of his contract and by order of the Committee on Buildings and Grounds. The skating pond did not hold water last year, but it is hoped that the work done this summer will remove all difficulty.

An important change was made by the trustees in the water contract of the college. All the college buildings are now supplied by the water of the Springfield Water Company, the tanks in the different buildings being filled by direct pressure from its mains, so that it is no longer necessary for the college engineer to pump water from the underground cistern to the tanks.

The main entrance to the college grounds was much improved by work done during the summer on Merion Avenue. The Supervisor of Roads of Montgomery County laid stone gutters along the front of Pembroke Hall and the trustees laid a solid cement pavement, edged with Belgian

blocks, on either side of the Pembroke archway, twenty-five feet by six in front of Pembroke West and seventy-five feet by six in front of Pembroke East. For the past three years all wagons have been required to stand here without entering the college grounds, and the ordinary macadamised road-bed proved unequal to the strain of the heavy hauling.

The question of the drainage of Pembroke Hall, which since the building of Pembroke East had been found inadequate, occupied the attention of the trustees, and, as Colonel George F. Waring had originally planned the drainage of the college, it was decided to ask the firm of Waring, Chapman & Farquhar to investigate the cause of the difficulty and prepare plans. It was learned that, although this firm had drawn the plans for the drainage ground of Merion, Radnor and Denbigh Halls, they had not been consulted in regard to the drainage of Pembroke East and West, which had been laid by the college employees in accordance with the system employed for the other halls, without making allowance for the differences of soil and levels. Although the appropriation for the year's repairs had already been expended, it seemed necessary to accept Waring, Chapman & Farquhar's estimate for relaying this drainage field with new tile and changing the relative depth of the receiving and discharging tanks. This work was done during the summer, and in their present condition the drainage grounds will suffice not only for the two Pembrokes, but for the new library building and the additional halls of residence needed in the immediate future.

The attention of the trustees is especially called to the full information in regard to the working of the college during the past year given in the appendix to this report.



The appendix contains the list of reappointments and changes in the instructors and officers for the year 1898-99; a list of the fellowships and scholarships awarded for the year 1898-99; the names of candidates receiving degrees during the year; a list of the speakers who have addressed the college; a list of the college preachers during the year; the gifts made to the college during the year; the titles of the scientific publications of the faculty during the year; a tabular summary of the courses of instruction; a comparative statement of the distribution of students in the various departments of study during the past twelve years; a brief description of the scholastic work of the past academic year, compiled from the reports prepared by the professors and instructors in the various departments; and the memorial resolutions passed by the faculty, alumnæ association and graduate club.

M. CAREY THOMAS,  
President.

October 21st, 1898.

## *Appendices.*

---

### *I.*

#### *Reappointments and Changes in the Academic Staff and in the Officers of Administration for the Year 1898-99.*

CHARLES McLEAN ANDREWS, PH.D., promoted to be Professor of History.

JOSEPH W. WARREN, PH.D., reappointed Associate Professor of Physiology.

ELMER P. KOHLER, PH.D., promoted to be Associate Professor of Chemistry.

MORTIMER LANSON EARLE, PH.D., Associate Professor of Greek, term expired.

FLORENCE BASCOM, PH.D., promoted to be Associate in Geology.

GORDON J. LAING, PH.D., promoted to be Lecturer in Latin.

CHARLES MONTAGUE BAKEWELL, PH.D., appointed Associate Professor of Philosophy, *vice* DICKINSON SERGEANT MILLER, PH.D., term expired.

WILLIAM ALLAN NEILSON, PH.D., appointed Associate in English Literature, *vice* ALFRED HODDER, PH.D., term expired.

ALBERT HAAS, PH.D., appointed Associate in German Literature, *vice* MAX F. BLAU, PH.D., term expired.

JOHN HOMER HUDDILSTON, PH.D., appointed Lecturer in Archæology, *vice* RICHARD NORTON, A.B., resigned.

LIGHTNER WITMER, PH.D., non-resident Lecturer in Experimental Psychology, term expired.

FREDERIC M. PAGE, PH.D., non-resident Lecturer in Italian and Spanish, term expired.

ROSE CHAMBERLIN, reappointed Reader in German and French.

ABBY KIRK, A.B., Reader in English, term expired.

HARRIET RANDOLPH, PH.D., reappointed Demonstrator in Biology and Reader in Botany.

LUCY MARTIN DONNELLY, A.B., reappointed Reader in English, and granted one year's leave of absence.

HELEN WHITALL THOMAS, A.B., reappointed Reader in English.

WILMER CAVE FRANCE, PH.D., reappointed Reader in Classical Literature.

LAURETTE EUSTIS POTTS, A.B., reappointed Reader in English.

HELEN STRONG HOYT, A.M., appointed Reader in English, *vice* MARY DELIA HOPKINS, A.M., term expired.

EDITH PETTIT, A.M., appointed Reader in English.

LOUISA SMITH, M.D., appointed Director of the Gymnasium, *vice* ALICE BERTHA FOSTER, M.D., term expired.

MARY SCATTERGOOD MACOMBER, appointed Assistant in the Gymnasium.

MARY SHERWOOD, M.D., reappointed Lecturer on Hygiene and Physician of the College.

ISABEL ELY LORD, B.L.S., appointed Librarian, *vice* HENRIETTA R. PALMER, A.B., resigned.

FLORENCE BAYARD KANE, appointed Assistant Librarian, *vice* JANE BOWNE HAINES, A.M., resigned.

FRANCES LOWATER, appointed Secretary, *vice* MADELINE VAUGHAN ABBOTT, A.B., term expired.

ISABEL MADDISON, B.Sc., PH.D., reappointed Secretary to the President and Reader in Mathematics.

EVELYN WALKER, resigned the Recording Secretaryship and appointed Mistress of Denbigh Hall.

ELIZABETH NIELDS, A.B., appointed Recording Secretary.

FREDERIKA M. KERR, reappointed Bursar.

ANNA BELL LAWTHOR, A.B., reappointed Assistant Bursar.

M. IDA GARBER, resigned the Mistress-ship of Pembroke Hall West and appointed Junior Bursar.

MRS. REGINALD CHASE, MISS SOPHIA KIRK, and MISS MARTHA GIBBONS THOMAS were reappointed Mistresses of Radnor Hall, Merion Hall, and Pembroke Hall East, respectively. MISS EVELYN WALKER was appointed Mistress of Denbigh Hall, *vice* Miss Mirah M. Logan, term expired, and MISS MARY HUNTER LINN was appointed Mistress of Pembroke Hall West, *vice* Miss M. Ida Garber resigned.

## II.

### *Fellowships and Scholarships Conferred for the Year 1898-99.*

MARION EDWARDS PARK, . . . . . *Bryn Mawr European Fellow.*  
Gloversville, N. Y. A.B., Bryn Mawr College, 1898. Graduate Student in Greek and English, Bryn Mawr College, 1898-99.

FLORENCE PEEBLES, . . . . . *Mary E. Garrett European Fellow.*  
Lutherville, Md. A.B., The Woman's College of Baltimore, 1895. Graduate Scholar in Biology, Bryn Mawr College, 1895-96, Fellow in Biology, 1896-97, and Graduate Student in Biology, 1897-98; Student in Biology, Zoological Station, Naples, 1898-99.

LIZZIE REBECCA LAIRD, . . . . . *President's European Fellow.*  
Owen Sound, Ont. A.B., University of Toronto, 1896. Teacher in Ontario Ladies' College, 1896-97; Fellow in Physics, Bryn Mawr College, 1897-98; Student in Physics, University of Berlin, 1898-99.

CHARLOTTE WILLIAMS HAZLEWOOD, . . . . . *Fellow in Greek.*  
Ellsworth, Me. A.B., Wellesley College, 1891. Graduate Student, Yale University, 1896-97, and Graduate Scholar, 1897-98; Teacher of Greek and Latin in the Classical High School, Lynn, Mass., 1891-96.

MARY HELEN RITCHIE, . . . . . *Fellow in Latin.*  
Falls of Schuylkill, Pa. A.B., Bryn Mawr College, 1896, and A.M., 1897. Graduate Scholar in Greek and Latin, Bryn Mawr College, 1896-97, and Graduate Student in Greek and Latin, 1897-98.

CARRIE ANNA HARPER, . . . . . *Fellow in English.*  
Charlestown, Mass. A.B., Radcliffe College, 1896, and A.M., 1898. Graduate Scholar in English, Bryn Mawr College, 1896-97; Graduate Student in English, Radcliffe College, 1897-98.

CAROLINE B. BOURLAND, . . . . . *Fellow in Romance Languages.*  
Peoria, Ill. A.B., Smith College, 1893. Teacher of French and German in Mrs. Starratt's School, Oak Park, Ill., 1895-96, and in the High School, Peoria, 1896-97; Student in the Sorbonne and Collège de France, 1897-98.

EDITH BRAMHALL, . . . . . *Fellow in History.*  
Chicago, Ill. A.B., University of Indiana, 1895; A.M., University of Pennsylvania, 1896.

FLORENCE PARTHENIA LEWIS, . . . . . *Fellow in Philosophy.*  
Fort Scott, Kan. A.B., University of Texas, 1897, and A.M., 1898.

LOUISE D. CUMMINGS, . . . . . *Fellow in Mathematics.*  
Hamilton, Ont. A.B., University of Toronto, 1895; Fellow, University of Pennsylvania, 1896-97; Graduate Student, University of Chicago, 1897-98.

MARGARET BAXTER MACDONALD, . . . . . *Fellow in Chemistry.*  
Charlottesville, Va. Pennsylvania State College, 1893-95; Student Assistant in Chemical Laboratory, Mt. Holyoke College, 1895-97; Graduate Scholar in Philosophy and Chemistry. Bryn Mawr College, 1897-98.

ANNAH PUTNAM HAZEN, . . . . . *Fellow in Biology.*  
Olcott, Vt. L.B., Smith College, 1895; S.M., Dartmouth College, 1897. Graduate Student in Biology, Dartmouth College, 1895-96; Graduate Scholar in Biology, Bryn Mawr College, 1897-98.

EMILY FOGG, . . . . . *Graduate Scholar and Fellow by Courtesy in History.*  
Chicago, Ill. Wellesley College, 1889-91; A.B., University of Chicago, 1897. Fellow in History, Bryn Mawr College, 1897-98.

MARGARET DUTTON KELLUM,

*Graduate Scholar in English and Teutonic Philology.*

Baltimore, Md. A.B., Bryn Mawr College, 1892. Teacher of Latin in the Eastern High School, Baltimore, 1892-97; Graduate Student in English, Bryn Mawr College, 1897-98.

SOPHIE YHLEN OLSEN, *Graduate Scholar in English and Teutonic Philology.*  
Philadelphia, Pa. A.B., Bryn Mawr College, 1898.

CARRIE LANE RIGGS, *Graduate Scholar in English and Teutonic Philology.*  
Erlanger, Ky. Ph.B., Earlham College, 1894. Teacher in the Madison Institute, Richmond, Ky., 1895-97; Student, University of Jena, Summer Course, 1898.

ELIZABETH WILLIAMS TOWLE, *Graduate Scholar in Physics and Biology.*  
Dobbs Ferry, N. Y. A.B., Bryn Mawr College, 1898.

EMILY AUGUSTA WESTWOOD, *Graduate Scholar in English and Philosophy.*  
Philadelphia, Pa. A.B., Cornell University, 1898.

ANNIE LYNDESAY WILKINSON,

*Graduate Scholar in German and Mathematics.*

Cleveland, O. A.B., Vassar College, 1897, and A.M., 1898.

LILIAN VIRGINIA KAMINSKI, . . . . . *Earlham Graduate Scholar.*  
Richmond, Ind. A.B., Earlham College, 1898.

ADA MARTITIA FIELD, . . . . . *Guilford Graduate Scholar.*  
Climax, N. C. A.B., Guilford College, 1898.

EDITH EMILY SMITH, . . . . . *Penn Graduate Scholar.*  
Warren County, Iowa. A.B., Penn College, 1898.

MARIANNA NICHOLSON BUFFUM, . . . . . *Foundation Scholar.*  
Newport, R. I. Prepared by the Rogers High School, Newport. Foundation Scholar, 1897-98.

ELIZABETH BETTERTON CHANDLEE, . . . . . *Foundation Scholar.*  
Baltimore, Md. Prepared by the Bryn Mawr School, Baltimore.

SUSAN JANNEY DEWEES, . . . . . *Foundation Scholar.*  
Westtown, Pa. Prepared by the Westtown Boarding School. Foundation Scholar, 1896-98.

MARY INDA HUSSEY, . . . . . *Foundation Scholar.*  
Richmond, Ind. Ph.B., Earlham College, 1896. Foundation Scholar, 1897-98.

NELLE E. WOOD, . . . . . *Foundation Scholar.*  
Wichita, Kan. L.B., Earlham College, 1896; A.B., Penn College, 1897. Foundation Scholar, Bryn Mawr College, 1897-98.

EDITH SOPHIA WRAY, . . . . . *Foundation Scholar.*  
New York City. Prepared by the Westtown Boarding School, Westtown, Pa., and by Oakwood Seminary, Union Springs, N. Y. Foundation Scholar, 1897-98.

ROSAMOND ALLEN, . . . . *First New England States Matriculation Scholar.*  
Boston, Mass. Prepared by Miss Mary P. Winsor's School, Boston.

LOIS META WRIGHT, . . *Second New England States Matriculation Scholar.*  
Anaheim, Cal. Prepared by the Bellows School, Portland, Me.

ELISE MESSENGER GIGNOUX,

*First New York and New Jersey Matriculation Scholar.*

Great Neck, N. Y. Prepared by the Brearley School, New York City.

HETTY GOLDMAN, *Second New York and New Jersey Matriculation Scholar.*  
New York City. Prepared by Dr. J. Sachs's School for Girls, New York City.

HELEN MAY BILLMEYER,  
*First Middle and Southern States Matriculation Scholar.*  
New York City. Prepared by Miss Florence Baldwin's School, Bryn Mawr, Pa.

DANA CRISSY CRAWFORD,  
*Second Middle and Southern States Matriculation Scholar.*  
Merion, Pa. Prepared by Miss Florence Baldwin's School, Bryn Mawr, Pa.

MARGUERITE SHELDON ALLEN, *First Western States Matriculation Scholar.*  
Cleveland, O. Prepared by the Hathaway-Brown School, Cleveland, Ohio.

EDNA NEBEKER, . . . . . *Second Western States Matriculation Scholar.*  
Clinton, Ind. Prepared by Miss Florence Baldwin's School, Bryn Mawr, Pa., and by the  
Girls' Classical School, Indianapolis, Ind.

MARY ELIZABETH MASLAND,  
*Trustees' Philadelphia Girls' High School Scholar.*  
Philadelphia, Pa. Prepared by the Girls' High School, Philadelphia. Holder of Trustees'  
Philadelphia Girls' High School Scholarship, 1897-98.

EMMA LOUISE MILLER, *Trustees' Philadelphia Girls' High School Scholar.*  
Philadelphia, Pa. Prepared by the Girls' High School, Philadelphia. Holder of Trustees'  
Philadelphia Girls' High School Scholarship, 1897-98.

BEATRICE MCGEORGE, . . . . . *Trustees' Lower Merion High School Scholar.*  
Cynwyd, Pa. Prepared by the Lower Merion High School, Ardmore, Pa. Holder of the  
Trustees' Lower Merion High School Scholarship, 1897-98.

DOROTHEA FARQUHAR, . . . . . *James E. Rhoads Junior Scholar.*  
Detroit, Mich. Prepared by the Detroit High School. Holder of the James E. Rhoads  
Sophomore Scholarship, 1897-98.

JEANNIE COLSTON HOWARD, . . . . . *James E. Rhoads Sophomore Scholar.*  
Baltimore, Md. Prepared by St. Timothy's School, Catonsville, Md. Holder of Second  
Bryn Mawr Matriculation Scholarship for the Middle and Southern States, 1897-98.

CORA HARDY, . . . . . *Anna Powers Memorial Scholar.*  
Birmingham, Ala. Prepared by the Pollock-Stephens Institute, Birmingham, by Prof. J. C.  
DuBose, and by Miss Florence Baldwin's School, Bryn Mawr, Pa. Holder of James E.  
Rhoads Junior Scholarship, 1897-98.

LEONORA WALTON GIBB, . . . . . *New Century Club Scholar.*  
Philadelphia, Pa. Prepared by the Girls' High School, Philadelphia. Holder of New Cen-  
tury Club Scholarship, 1897-98.

ELLEN DEBORAH ELLIS, *Girls' High and Normal School Alumnæ Scholar.*  
Philadelphia, Pa. Prepared by the Girls' High School, Philadelphia. Holder of Philadel-  
phia Girls' High and Normal School Alumnæ Scholarship, 1897-98.

MARY NICHOLSON BROWNE, . . . . . *Bryn Mawr School Scholar.*  
Baltimore, Md. Prepared by the Bryn Mawr School, Baltimore. Holder of Bryn Mawr School  
Scholarship, 1895-99.

CLARISSA ISABEL CRANE, . . . . . *Bryn Mawr School Scholar.*  
Baltimore, Md. Prepared by the Bryn Mawr School, Baltimore.

EDITH CAMPBELL CRANE, . . . . . *Bryn Mawr School Scholar.*  
Baltimore, Md. Prepared by the Bryn Mawr School, Baltimore. Holder of Bryn Mawr School  
Scholarship, 1896-99.

LUCIA DAVIS, . . . . . *Bryn Mawr School Scholar*.  
Warren, Md. Prepared by the Bryn Mawr School, Baltimore, Md.

MARIAN MARGARET HICKMAN, . . . . . *Bryn Mawr School Scholar*.  
Baltimore, Md. Prepared by the Bryn Mawr School, Baltimore. Holder of Bryn Mawr School  
Scholarship, 1896-99.

MARY GRACE KILPATRICK, . . . . . *Bryn Mawr School Scholar*.  
Baltimore, Md. Prepared by the Bryn Mawr School, Baltimore. Holder of Bryn Mawr School  
Scholarship, 1896-99.

ETHEL LEVERING, . . . . . *Bryn Mawr School Scholar*.  
Baltimore, Md. Prepared by the Bryn Mawr School, Baltimore. Holder of Bryn Mawr School  
Scholarship, 1895-99.

LAURA FOWLER, . . . . . *Special Baltimore Matriculation Scholar*.  
Clarksburg, W. Va. Prepared by the Bryn Mawr School, Baltimore, Md.

HANNAH TERESA ROWLEY, . . . . . \**Simon Muhr Scholar*.  
Philadelphia, Pa. Prepared by the Girls' High School, Philadelphia. Holder of Simon  
Muhr Scholarship, 1897-98.

CORINNE SICKEL, . . . . . \**Simon Muhr Scholar*.  
Philadelphia, Pa. Prepared by the Girls' High School, by the Girls' Normal School, and by  
Miss Case and Miss Hallowell's School, Philadelphia. Holder of Simon Muhr Scholarship,  
1897-98.

---

\* These scholarships are awarded by the Board of Directors of City Trusts, Philadelphia, the successful candidates themselves choosing the institution of learning in which the scholarship shall be held.

### III.

#### *Degrees Conferred During the Academic Year 1897-98.*

##### DOCTORS OF PHILOSOPHY

ESTHER F. BYRNES, of Pennsylvania.

A.B., Bryn Mawr College, 1891, and A.M., 1894. Demonstrator in the Biological Laboratory, Vassar College, 1891-93; Graduate Scholar in Biology, Bryn Mawr College, 1893-94, Fellow in Biology, 1894-95, and Graduate Student in Biology, 1895-97. Subjects: Morphology and Physiology. Thesis: The Maturation and Fertilisation of the Egg of *Limax*.

NELLIE NEILSON, of Pennsylvania.

A.B., Bryn Mawr College, 1893, and A.M., 1894. Graduate Student in English and History, Bryn Mawr College, 1893-94, and Fellow in History, 1894-95; Holder of the American Fellowship of the Association of Collegiate Alumnae, and Graduate Student in English and History, Bryn Mawr College, 1895-96; Engaged in Research work in History in Cambridge, England, and in the Public Record Office, London, England, 1896-97; Teacher of History in Miss Irwin's School, Philadelphia, Pa., 1897-98. Subjects: English and History. Thesis: Economic Conditions on Ramsey Manors.

WINNIFRED WARREN, of Massachusetts.

A.B., Boston University, 1891, and A.M., 1894; Ph.D., Bryn Mawr College, 1898. Fellow in Latin, Bryn Mawr College, 1893-94, and Fellow by Courtesy, 1894-96; Holder of the Mary E. Garrett European Fellowship, and Student in Greek and Latin, Universities of Munich and Berlin, 1896-97; Instructor in Latin, Vassar College, 1897-98. Subjects: Greek and Latin. Thesis: A Study of Conjunctional Temporal Clauses in Thukydides.

##### MASTERS OF ARTS

MARY LOUELLA FAY, of Massachusetts.

A.B., Bryn Mawr College, 1897; Graduate Student in History, Bryn Mawr College, 1897-98.

HELEN STRONG HOYT, of Pennsylvania.

A.B., Bryn Mawr College, and George W. Childs Prize Essayist, 1897; Graduate Student in English, Bryn Mawr College, 1897-98.

EDITH PETTIT, of Pennsylvania.

A.B., Bryn Mawr College, 1895; Student at the Sorbonne and Collège de France, 1896-97; Graduate Student in English, Bryn Mawr College, 1897-98.

BERTHA REMBAUGH, of Pennsylvania.

A.B., Bryn Mawr College, 1897; Graduate Scholar in English, History, and Philosophy, Bryn Mawr College, 1897-98.

ANNIE HEATH THOMAS, of Pennsylvania.

A.B., Bryn Mawr College, 1897; Graduate Scholar in Physics and Biology, Bryn Mawr College, 1897-98.

##### BACHELORS OF ARTS

EMMA CADBURY, JR., of Philadelphia.

Prepared by Miss Case and Miss Hallowell's School, Philadelphia. Group: History and Political Science. The work for this degree was completed in February, 1898.

FRANCES AMELIA FINCKE, of New York.

Prepared by the Utica Free Academy, Utica, N. Y. Group: History and Political Science. The work for this degree was completed in February, 1898.

ISABEL JOSEPHINE ANDREWS, of Boston.

Prepared by the Girls' Latin School, Boston. Group: Greek and French.



CAROLINE ARCHER, of Pennsylvania.

Prepared by Dr. M. E. Scheibner, Reading, Pa. Group: Latin and German.

JULIET C. BALDWIN, of Baltimore.

Prepared by the Bryn Mawr School, Baltimore. Group: History and Political Science.

SUE AVIS BLAKE, of Philadelphia.

Prepared by the Walton School, Philadelphia. Group: Mathematics and Physics.

MARY ALTAIR BOOKSTAVEN, of New York City.

Prepared by Miss Florence Baldwin's School, Bryn Mawr, Pa. Group: History and Political Science.

JENNIE NICHOLSON BROWNE, of Baltimore.

Prepared by the Bryn Mawr School, Baltimore. Holder of Bryn Mawr School Scholarship, 1894-98. Group: History and Political Science.

HANNAH T. CARPENTER, of Providence.

Prepared by Miss Wheeler's School, Providence, and by private study. Group: Chemistry and Biology.

MARY ELEANOR CONVERSE, of Philadelphia.

Prepared by Miss Florence Baldwin's School, Bryn Mawr. Group: German and French.

MARGARET BRYDIE DYER, of St. Louis.

Prepared by the Mary Institute, St. Louis. Group: Greek and Latin.

ALICE PEIRSON GANNETT, of Washington, D.C.

Prepared by the Washington High School, and by private study. Group: English and German.

MARY UHLE GITHENS, of Philadelphia.

Prepared by Miss Irwin's School, Philadelphia. Group: German and French.

GERTRUDE ALICE GOFF, of Bryn Mawr.

Prepared by Miss Florence Baldwin's School, Bryn Mawr. Group: History and Political Science.

JOSEPHINE C. GOLDMARK, of New York City.

Prepared by the Brackett School, New York City, and by private study. Group: Greek and Latin.

ELIZABETH DELANO GRAY, of Massachusetts.

Prepared by the Lynn High School, Lynn, Mass. Group: Chemistry and Biology.

ELIZABETH GLEIM GUILFORD, of Pennsylvania.

Swarthmore College, 1889-90. Group: Mathematics and Physics.

ANNA M. HAAS, of Pennsylvania.

Prepared by Mrs. Blackwood's School, Lancaster, Pa., by Prof. Kieffer, and by private study. Group: Latin and German.

ALICE BRADFORD HAMMOND, of Connecticut.

Prepared by the Hillhouse High School, New Haven, Conn. Group: Greek and Latin.

MABEL STEVENS HAYNES, of Boston.

Prepared by Miss Florence Baldwin's School, Bryn Mawr, Pa. Student in Preliminary Medical Course. Group: Chemistry and Biology.

ETTA HERR, of Pennsylvania.

Prepared by Hellmuth College, London, Ont., and by private study. Group: Political Science and Philosophy.

ALICE WATKINS HOOD, of Baltimore.

Prepared by the Bryn Mawr School, Baltimore. Holder of Bryn Mawr School Scholarship 1894-98. Group: History and Political Science.

FLORENCE STEVENS HOYT, of Georgia.

Prepared by private study. Group: Chemistry and Biology.

EVELYN HUNT, of Philadelphia.

Prepared by the Friends' Central School, Philadelphia. Holder of the Anna Powers Memorial Scholarship, 1895-98. Group: History and Political Science.

GRACE EVELYN LAWTON, of Rhode Island.

Prepared by the Rogers High School, Newport, R. I. Group: Latin and Mathematics.

GRACE PERLEY LOCKE, of Maine.

Prepared by the Portland High School, Portland, Me., by private study, and by the Misses Shipley's School, Bryn Mawr, Pa. Group: Greek and Philosophy.

KATHARINE RIEGEL LOOSE, of Pennsylvania.

Prepared by the Reading Seminary, Reading, Pa., and by Dr. M. E. Scheibner. Group: Latin and English.

GRACE CONSTANT LOUNSBERY, of New York City.

Prepared by Miss Florence Baldwin's School, Bryn Mawr, Pa. Student in Preliminary Medical Course. Group: Chemistry and Biology.

CHARLY TIFFANY MITCHELL, of New York City.

Prepared by private study. Group: Greek and Latin.

ELIZABETH NIELDS, of Delaware.

Prepared by the Friends' School, Wilmington, Del., and by Miss Mary E. Stevens's School, Germantown, Philadelphia, Pa. Group: History and Political Science.

ULLERICKA HENDRIETTA OBERGE, of Pennsylvania.

Prepared by the Girton School, Haverford, Pa., and by Miss Case and Miss Hallowell's School, Philadelphia, Pa. Group: Latin and French.

SOPHIE YHLEN OLSEN, of Philadelphia.

Prepared by the Friends' Central School, Philadelphia. Group: Greek and English.

MARION EDWARDS PARK, of New York.

Prepared by the Gloversville High School, Gloversville, N. Y., and by private study. Group: Greek and English.

AGNES FRANCES PERKINS, of New York City.

Prepared by the Oxford Academy, Oxford, N. Y.; New York Normal College, 1892-94. Group: Greek and English.

SARAH SHREVE RIDGWAY, of New Jersey.

Prepared by Miss Mary E. Stevens's School, Germantown, Philadelphia, Pa. Group: Chemistry and Biology.

CONSTANCE ROBINSON, of Providence.

Prepared by Miss Florence Baldwin's School, Bryn Mawr, Pa., and by private study. Group: Greek and Latin.

EDITH GERTRUDE SCHOFF, of Philadelphia.

Prepared by the Walton School, Philadelphia. Group: Chemistry and Biology.

MARY SHEPPARD, of Philadelphia.

Prepared by Miss Mary E. Stevens's School, Germantown, Philadelphia. Group: Greek and Latin.

MARY ELLA STONER, of Pennsylvania.

Prepared by the Reading High School, Reading, Pa. Group: Latin and German.

**ANNE HERVEY STRONG**, of Massachusetts.

Prepared by the Metzger Institute, Carlisle, Pa., and by private study. Group: Chemistry and Biology.

**ELIZABETH WILLIAMS TOWLE**, of New York.

Prepared by the Iowa College Academy, Grinnell, Iowa. Group: Chemistry and Biology.

**MARTHA TRACY**, of New Jersey.

Prepared by the Plainfield Seminary, Plainfield, N. J. Group: Chemistry and Biology.

**EDITH LOUISE VAN KIRK**, of Philadelphia.

Prepared by Miss Case and Miss Hallowell's School, Philadelphia, and by private study. Group: Latin and French.

**FLORENCE C. VICKERS**, of Arizona.

Prepared by Wolfe Hall, Denver, Colo., and by the Friends' Central School, Philadelphia, Pa. Group: Latin and German.

**LAURA E. WILKINSON**, of Philadelphia.

Prepared by the Girls' High School, Philadelphia, and by Miss Florence Baldwin's School, Bryn Mawr, Pa. Group: Latin and English.

**HELEN ELIZABETH WILLIAMS**, of Philadelphia.

Prepared by Miss Case and Miss Hallowell's School, Philadelphia, by Miss Helen J. Robins, and by Miss Emilie N. Martin. Group: German and French.

**BERTHA GORDON WOOD**, of Massachusetts.

Prepared by the Friends' Academy, New Bedford, Mass. Group: Chemistry and Biology.

**HELEN MARY ZEBLEY**, of Philadelphia.

Prepared by the Friends' School, Philadelphia. Group: History and Political Science.

#### IV.

#### *Addresses and Concerts During the Year 1897-98.*

##### *Before the College :*

MR. JAMES WOOD, "The Development of Doctrine in the Progress of the Protestant Reformation in England."

"The Rise of the Society of Friends and its Distinguishing Doctrines."

"The Practical Results of Quakerism."

PROFESSOR WILLIAM KNIGHT, "Personal Reminiscences of Tennyson and Browning."

"Poetry of Browning."

M. RENÉ DOUMIC, "Alphonse Daudet," "Le Théâtre de Victor Hugo."

MR. AND MRS. SIDNEY WEBB, "Methods of Sociological Study."

PROFESSOR PERCY GARDNER, "Greek Portraits."

MRS. ALICE FREEMAN PALMER, Informal Address to the Students at Morning Chapel.

##### *Before the Graduate Club :*

PROFESSOR BLISS PERRY, "The Short Story."

MR. HERBERT WELSH, "Educated Women in the Movement for Good Government."

MR. TALCOTT WILLIAMS, "City Successes."

PROFESSOR WILLIAM JAMES, "What Makes Human Lives Significant?"

##### *Before the Philosophical Club :*

MR. JOHN JAY CHAPMAN, "The Relation between Public and Private Opinion."

MR. BENJAMIN IVES GILMAN, "The Psychology of Music."

MR. NORMAN HAPGOOD, "The Influence of the Study of Philosophy on Imagination and Style."

PROFESSOR GEORGE SANTAYANA, "The Psychological Distinction between Poetry and Prose."

##### *Before the De Rebus Club :*

MR. WILLIAM LLOYD GARRISON, "Single Tax."

PROFESSOR WALTER A. WYCKOFF, Reading from "The Workers in the West."

MRS. BERTHA KUNST BAKER, "A Reading from Shakespeare."

MR. ELLIS YARNALL, "Hartley, Derwent, and Sara Coleridge."

MR. PERCIVAL CHUBB, "William Morris: the Man and his Mission."

MRS. MABEL LOOMIS TODD, "Japan."

MR. JACOB A. RIIS, "The Condition of Children in the New York Slums."

*Before the College Settlement Association :*

MISS JANE ADDAMS, "College Settlements and the Labor Movement."

*Before the Christian Union :*

THE REV. FRANCIS A. BROWN, D.D., "Bible Study."

MISS RUTH ROUSE, "The Work of the Student Volunteer Mission Society."

MISS OLAJIA JOHANNSDOTTIR, "The Temperance Movement in Iceland."

DR. PAULINE ROOT, "Medical Missions in India."

THE REV. FATHER HUNTINGDON, Sermon.

*Before the Missionary Association :*

MR. ROBERT WILDER, "Missionary Work."

MISS RUTH ROUSE, "Students' Missions."

*Before the Minor Class in Philosophy :*

DR. A. FERREE WITMER, "The Development of Sensation and Association Centres in the Brain of the Child."

*Before the Athletic Association :*

MR. HARRISON, "A Talk on Golf."

*Under the Auspices of the Music Committee :*

MISS FLORENCE MOSHER AND MISS EMILY N. BURBANK, "An Interpretation of Polish Music."

KNEISEL QUARTETTE, Three Concerts.

MR. AND MRS. GEORGE HENSCHEL, Song Recital.

V.

*College Preachers During the Year 1897-98.*

PROFESSOR GEORGE AMOS BARTON, PH.D., Bryn Mawr College.

PROFESSOR GEORGE F. MOORE, D.D., Andover Theological Seminary.

THE REV. GEORGE DANA BOARDMAN, D.D., LL.D., Pastor of the First Baptist Church, Philadelphia.

THE REV. JOHN HEYL VINCENT, LL.D., Bishop of the Methodist Episcopal Church.

THE REV. AMORY H. BRADFORD, D.D., Pastor of the First Congregational Church, Montclair, N. J.

THE RT. REV. HENRY C. POTTER, D.D., LL.D., Bishop of New York.

THE REV. THOMAS KELLY CHEYNE, Oriel Professor, Oxford, and Canon of Rochester.

THE REV. HENRY VAN DYKE, D.D., LL.D., Pastor of the Brick Church, New York City.

PROFESSOR RUFUS M. JONES, Haverford College.

THE REV. ANNIS FORD EASTMAN, Pastor of the Park Church, Elmira, N. Y.

THE REV. PHILIP S. MOXON, D.D., Pastor of the South Congregational Church, Springfield, Mass.

THE REV. WILLIAM S. RICHARDS, D.D., Pastor of the Crescent Avenue Presbyterian Church, Plainfield, N. J.

THE REV. CHARLES CUTHBERT HALL, D.D., President of Union Theological Seminary, New York City.

## VI.

### *Gifts received by the College during the Year 1897-98.*

Our sincere gratitude is due for the following gifts which have been received during the past year, in addition to gifts of special books to the library which are enumerated and acknowledged in the Report of the Librarian:

To the Treasurer of the Bryn Mawr School, for Bryn Mawr School Scholarships, \$3,600.

To Miss Ethel Powers, for the Anna Powers Memorial Scholarship, \$200.

To the Treasurer of the Normal School Alumnæ Association, for the Girls' High and Normal School Alumnæ Scholarship, \$100.

To Mrs. A. H. Fetterolf, Treasurer, for the New Century Club Scholarship, \$100.

To Miss Garrett, for Special Scholarship for best entrance examination passed in Baltimore in June, 1898, \$300.

To Mr. J. G. Rosengarten, for subscription to the "Revue des Deux Mondes," and for purchase of M. Brunetière's works, \$33.

To Miss Garrett, for purchase of books for library, \$400.

To Miss Garrett, for plan of grounds prepared by Messrs. Olmsted, final payment, \$466.33.

To the Class of 1893, donation to Library, \$202.75.

Gifts of money, amounting in all to about \$1,000, were received from friends who requested that their names should not be mentioned, for the following objects: Subscriptions to the American Classical School at Athens, American Classical School at Rome, Woods Holl Marine Laboratory, American Women's Table at Naples, Expenses of the Alumnæ Association, Graduate Handbook, Public Lectures, and other objects.

VII.

*Publications of the Faculty during the Year 1897-1898.*

Dr. Charles McLean Andrews,

"The Historical Development of Modern Europe," Vol. II. pp. vi., 467. G. P. Putnam's Sons, 1898.

Review of Maitland's "Domesday Book and Beyond." *American Historical Review*, October, 1897.

Review of Sloane's "Life of Napoleon Bonaparte." *American Historical Review*, January, 1898.

Review of Seignobos's "Histoire politique de l'Europe contemporaine." *Annals of the American Academy*, May, 1898.

Dr. George A. Barton,

"Women in the Church and in the Synagogue." *The American Friend*.

"The Province of Scholarship in the Interpretation of Scripture." *The American Friend*.

"The Heart of Religion." *The American Friend*.

"The New Logia or Sayings of Jesus." *The American Friend*.

"Following Christ." *The American Friend*.

"The Sufferer." *The American Friend*.

Dr. Florence Bascom,

"The Finland Excursion of the Seventh International Congress of Geologists." *The American Geologist*, November, 1897.

Review of Dr. Bäckström's brochure on "Vestanäfaltet, en Petrogenetisk Studie." *The American Geologist*, June, 1898.

Dr. James Douglas Bruce,

"De Ortu Waluanii; an Arthurian Romance now first edited from the Cottonian Mss., Faustina B. VI, of the British Museum." *Publications of the Modern Language Association of America*, Vol. XIII, No. 3.



Dr. Hermann Collitz,

“Traces of Indo-European Accentuation in Latin.” *Transactions of the American Philological Association*, Vol. XXVIII.

“Sammlung der Griechischen Dialekt-Inschriften,” von H. Collitz und F. Bechtel, Band III, 2. Hälfte, 1. Heft. Göttingen, 1898.

Mr. James Harkness,

“Introduction to the Theory of Analytic Functions.” (Harkness and Morley.) The Macmillan Company, 1898.

Dr. Lindley Miller Keasbey,

“The Nicaragua Canal in the Light of Present Politics.” *American Monthly Review of Reviews*, November, 1898.

Dr. Edward H. Keiser,

“New Experiments in the Quantitative Synthesis of Water.” *American Chemical Journal*, Vol. XX, p. 733.

Dr. Elmer P. Kohler,

“Ethanedisulphonic Acid.” *American Chemical Journal*, Vol. XIX, p. 730.

“Ethylenesulphonic Acid.” *American Chemical Journal*, Vol. XX, p. 680.

Dr. James H. Leuba,

“The Psycho-physiology of the Moral Imperative.” *American Journal of Psychology*, 1898.

Dr. Isabel Maddison,

Review of Lambert’s “Analytic Geometry for Technical Schools and Colleges.” *Bulletin of American Mathematical Society*, February, 1898.

Dr. Louis Emil Menger,

“Additional Remarks on ‘Free’ and ‘Checked’ Vowels in Gallic Popular Latin.” *Proceedings of the Modern Language Association of America*, 1898, pp. vi-ix.

Dr. Thomas Hunt Morgan,

“Regeneration and Liability to Injury.” *Zoological Bulletin*, Vol. I, No. 6, 1898.

“Experimental Studies of the Regeneration of *Planaria maculata*.” *Archiv. f. Entwicklungsmechanik*, Vol. VII, 1898.

“The Biological Problems of To-day—Developmental Mechanics.” *Science*, Vol. VII, 1898.

“Regeneration in Oligochaete Worms.” *Science*, Vol. VI, 1897.

“Regeneration in *Planaria maculata*.” *Science*, Vol. VII, 1898.

“The Effect of Salt Solutions on Unfertilized Eggs of *Arbacia*.” *Science*, Vol. VII, 1898.

Dr. Charlotte Angas Scott,

“Sur la transformation des courbes planes.” Read before the French Association for the Advancement of Science, in August, 1897.

“Studies in the transformation of plane algebraic curves.” *The Quarterly Journal of Pure and Applied Mathematics*, Vol. XXIX.

Review of Plücker’s “Collected Papers,” ed. Schönflies. *Bulletin of the American Mathematical Society*, December, 1897.

“On the Intersections of Plane Curves.” *Bulletin of the American Mathematical Society*, March, 1898.

“Note on Linear Systems of Curves.” *Nieuw Archief voor Wiskunde*, Amsterdam. Series 2, Vol. III.

Dr. Herbert Weir Smyth,

“Mute and Liquid in Greek Melic Poetry.” *Transactions of the American Philological Association*, Vol. XXIX.

Articles on Thucydides and Socrates in the *Library of the World’s Best Literature*.

President M. Carey Thomas,

“Mr. Sage and Coeducation.” Address delivered at the memorial exercises in honor of the late Henry Williams Sage, held at

Cornell University, 1898. Published by Cornell University, 1898.

“Annual Report of the President of Bryn Mawr College for 1896-97.” Published by Bryn Mawr College, 1898.

“College Education as a Factor in the Wage-Earning Power of Women.” Address delivered before the New Century Club of Philadelphia, January 5th, 1898. Printed in the Philadelphia daily papers of the following date.

## VIII.

*Tabular Statement of the Courses of Instruction given in 1897-98.*

DEPARTMENT	COURSE	INSTRUCTOR	HOURS WEEKLY	NO. IN CLASS	
				1ST SEM.	2ND SEM.
SANSKRIT . . .	<i>Graduate Classes</i>				
	Sanskrit, advanced . . . . .	Dr. Collitz.	1	1	2
GREEK . . . .	Elementary Greek, Grammar, Xenophon's Anabasis, Books I.-IV., Homer's Iliad, Books I.-III.	Dr. Earle	5	17	15
	Homer's Odyssey, Selections from Books I.-XII, minor . . . . .	Dr. France	2	14	14
	Lysias, minor . . . . .	Dr. Earle	2	12	
	Euripides, minor . . . . .	"	2		14
	Greek Prose Composition, minor .	"	1	12	14
	Lectures on the History of Greek Literature, Epic and Lyric, major	Dr. France	2	10	
	Lectures on History of Greek Literature, Drama and Prose, major .	"	2		10
	Sophocles, major . . . . .	Dr. Earle	3	10	
	Demosthenes, major . . . . .	"	3		10
	Lyric Poets, post-major . . . . .	Dr. Smyth	2	5	
	Pindar, post-major . . . . .	"	2		4
	Demosthenes, post-major . . . .	Dr. Earle	2	2	
	Aristophanes, post-major . . . .	"	2		2
	Lucian, post-major . . . . .	"	1	2	
	Euripides, post-major . . . . .	"	1		3
	New Testament Greek . . . . .	Dr. Barton	1	3	2
	<i>Graduate Classes</i>				
	Epigraphy . . . . .	Dr. Smyth	4	4	5
LATIN . . . .	Horace, minor . . . . .	Dr. Laing	2	60	59
	Livy, minor . . . . .	Dr. Lodge	2	59	
	Livy and Cicero, minor . . . .	"	2		59
	Latin Prose Composition, minor .	"	1	60	60
	Lectures on the History of Latin Literature, major . . . . .	Dr. Laing	2	17	13
	Tacitus, major . . . . .	Dr. Lodge	3	16	
	Juvenal, Tibullus, Propertius, major	"	3		15
	Terence, post-major . . . . .	"	2	12	
	Plautus, post-major . . . . .	"	2		9
	Lucretius, post-major . . . . .	Dr. Lain	3	4	
	Lucan, Seneca, post-major . . . .	"	3		4
	Vergil, Georgics, post-major . . . .	"	1		8
	Catullus, post-major . . . . .	"	1		7
	<i>Graduate Classes</i>				
	Roman Satire . . . . .	Dr. Lodge	3	4	4
	Latin Syntax . . . . .	"	1	4	4
ENGLISH . . .	Lectures on the English Language and Lectures on the History of Anglo-Saxon Literature, required	Dr. Thomas	3	153	
	Lectures on the History of English Literature to the time of Shakespeare, inclusive, required . . . .	"	3		141
	Essay Work, required, first year . .	Dr. Gwinn, L. M. Donnelly, H. W. Thomas, L. E. Potts, M. D. Hopkins, H. S. Hoyt.	2	83	81

*Tabular Statement of the Courses of Instruction given in 1897-98,  
continued.*

DEPARTMENT	COURSE	INSTRUCTOR	HOURS WEEKLY	NO. IN CLASS	
				1ST SEM.	2ND SEM.
ENGLISH . . . (continued)	Essay Work, required, second year	Dr. Gwinn, Kirk and H. W. Thomas	2	54	46
	Descriptive Writing . . . . .	L. M. Donnelly and H. W. Thomas.	2	8	9
	Bright's Reader and Beowulf, minor	Dr. Bruce	5	3	
	Beowulf, Morris, and Skeat's Specimens of Early English, Part I.				
	Chaucer . . . . .	"	5		3
	English Critics of Life: Burke, Carlyle, Ruskin, major	Dr. Gwinn	3	24	24
	Eighteenth Century Poets, major	Dr. Hodder.	2	22	18
	<i>Graduate Classes</i>				
	English Drama . . . . .	"	2	5	5
	English Novelists of the Nineteenth Century . . . . .	"	3	4	4
	Eighteenth Century Prose Writers .	Dr. Gwinn	3	9	9
	Anglo-Saxon, Introduction . . . .	Dr. Bruce	2		1
	Anglo-Saxon, Elene and Andreas .	"	3	1	
	Middle English Romances . . . . .	"	3		1
GERMAN . . .	Elementary German, Grammar and Translation . . . . .	R. Chamberlin	5	8	10
	Lectures on the History of German Literature from Klopstock to the present time, minor . . . . .	Dr. Collitz	2	29	31
	German Reading, selected, minor .	"	2	28	28
	German Reading, Faust, Part I., minor . . . . .	Dr. Blau	2	29	24
	German Prose Composition, minor	"	1	27	25
	German Conversation, minor and major . . . . .	R. Chamberlin	1	7	7
	Lectures on the History of Earlier Literature, major . . . . .	Dr. Blau	2	8	10
	Selected Reading (Earlier German Literature), major . . . . .	"	1	8	10
	German Reading, Faust, Part II., major . . . . .	Dr. Collitz	1	7	9
	German Prose Composition, major	Dr. Blau	1	8	10
	German Contemporary Literature, post-major . . . . .	"	2	8	9
	German Syntax, post-major . . .	R. Chamberlin	2	4	3
	Middle High German, post-major .	Dr. Blau	2	2	2
	<i>Graduate Classes</i>				
	Old High German . . . . .	Dr. Collitz	2	1	1
FRENCH . . .	Elementary French, Grammar and Translation . . . . .	R. Chamberlin	5	10	12
	Lectures on the History of French Literature of the Eighteenth and Nineteenth Centuries, minor . .	Dr. Fontaine	2	24	23
	French Critical Reading, minor . .	Dr. Page	1	32	29
	French Prose Composition, minor .	"	1	32	29

*Tabular Statement of the Courses of Instruction given in 1897-98,  
continued.*

DEPARTMENT	COURSE	INSTRUCTOR	HOURS WEEKLY	NO. IN CLASS	
				1ST SEM.	2ND SEM.
FRENCH . . . (continued)	French Reading and Conversation, minor . . . . .	Dr. Page	1	32	29
	Lectures on French Literature of the Sixteenth and the Seventeenth Centuries, major . . . . .	Dr. Fontaine	2	14	
	Lectures on Modern French Litera- ture, major . . . . .	"	2		13
	French Critical Reading, major . .	"	1	8	7
	French Prose Composition, major .	"	1	8	7
	French Conversation, major . . .	"	1	8	9
	Modern French Comedy, post-major	"	2	6	
	<i>Graduate Classes</i>				
	French Epic Poetry . . . . .	"	2	2	1
	Historical French Syntax . . . . .	"	1	1	
	Old French Philology . . . . .	Dr. Menger	2	4	4
	Old French Texts . . . . .	"	2	3	2
	French Physiological Phonetics . .	"	1	4	4
	Journal Club . . . . .	"	1	4	4
ITALIAN AND SPANISH . .	Italian Grammar, Composition and Critical Reading, minor . . . . .	"	3	12	12
	Italian Literature, Grammar, Com- position, and Critical Reading, major . . . . .	"	2	5	
	Italian Literature, Dante . . . . .	"	3		8
	Spanish Grammar, Composition and Reading, minor . . . . .	Dr. Page	4		3
	<i>Graduate Classes</i>				
	Italian Philology . . . . .	Dr. Menger	1	1	
	Spanish Drama of Seventeenth Cen- tury, and Modern Spanish . . . .	Dr. Page	2		1
	<i>Graduate Classes.</i>				
SEMITIC LANGUAGES AND BIBLICAL LITERATURE	Advanced Hebrew . . . . .	Dr. Barton	2	2	2
	Assyrian Seminary . . . . .	"	1	1	1
	Pentateuchal Criticism . . . . .	"	1		4
	History of the Progress and Develop- ment of Religious Ideas in the Bible . . . . .	"	2	2	2
	Historical Outlines of Christian Thought . . . . .	"	1	2	2
	History of Israel . . . . .	"	2	2	2
	Hebrew Poetry . . . . .	"	1	2	
	Hebrew Prophets . . . . .	"	1	6	11
HISTORY . . .	History of Mediæval Europe to the Period of the Renaissance . . . .	Dr. Andrews	5	68	
	History of Mediæval Europe from the Period of the Renaissance to the close of the Religious Wars .	"	5		69
	American Constitutional History post-major . . . . .	"	2	11	9

*Tabular Statement of the Courses of Instruction given in 1897-98,  
continued.*

DEPARTMENT	COURSE	INSTRUCTOR	HOURS WEEKLY	NO. IN CLASS.	
				1ST SEM.	2ND SEM.
HISTORY . . (continued)	<i>Graduate Classes</i>				
	Historical Definition, Method, and Criticism . . . . .	Dr. Andrews	. 2 .	. 5 .	. . . .
	History of the Community . . . .	"	. 1 .	. 5 .	. 6 .
	History of the Roman Law . . . .	"	. 2 .	. . . .	. 5 .
	Historical Seminary . . . . .	"	1 hour fortn'ly	. 4 .	. 4 .
POLITICAL SCIENCE . .	History of Political, Economic and Sociological Theories, minor and major . . . . .	Dr. Keasbey	. 5 .	. 78 .	. 76 .
	Descriptive Sociology, post-major .	"	. 3 .	. 5 .	. 2 .
	Theoretical Sociology, post-major .	"	. 2 .	. 7 .	. 5 .
	PHILOSOPHY . Psychology, Logic, History of Philosophy and Ethics, required . . .	Drs. Miller and Barton	. 4 .	. 58 .	. 58 .
MATHEMATICS	Lectures on the Origin and Contents of the Books of the Bible, required	Dr. Barton	. 1 .	. 61 .	. 64 .
	History of English Ethics, minor .	Dr. Miller	. 3 .	. 11 .	. 10 .
	Physiological and Experimental Psychology, minor . . . . .	Dr. Witmer	. 2 .	. 14 .	. 17 .
	<i>Graduate Classes</i>				
	Advanced Logic . . . . .	Dr. Miller	. 4 .	. 1 .	. 1 .
	Trigonometry, required . . . . .	J. Harkness	. 2 .	. 14 .	. . . .
	Trigonometry, required . . . . .	Dr. Maddison	. 3 .	. . . .	. 11 .
	Geometrical Conics, required . . .	Dr. Scott	. 2 .	. . . .	. 17 .
	Analytical Conics, minor . . . . .	"	. 5 .	. 8 .	. . . .
	Algebra, Advanced Trigonometry, and Theory of Equations, and Elementary Differential and Integral Calculus, minor . . . . .	J. Harkness	. 5 .	. . . .	. 5 .
	Differential and Integral Calculus, Differential Equations, major . .	"	. 5 .	. 4 .	. . . .
	Curve Tracing, Analytical Geometry of Three Dimensions, major . .	Dr. Scott	. 4 .	. . . .	. 6 .
	History of Mathematics, major . .	"	. 1 .	. . . .	. 6 .
	Modern Analytical Geometry, post-major . . . . .	"	. 2 .	. 2 .	. 2 .
	Analytical Geometry of Three Dimensions, post-major . . . . .	Dr. Maddison	. 1 .	. 1 .	. 1 .
	Elliptic Functions, post-major . . .	J. Harkness	. 2 .	. 4 .	. 3 .
	<i>Graduate Classes</i>				
	Elliptic and Hyper-elliptic Curves .	Dr. Scott	. 2 .	. 3 .	. . . .
	Higher Plane Curves . . . . .	"	. 2 .	. . . .	. 3 .
	Theory of Groups . . . . .	J. Harkness	. 2 .	. 2 .	. 2 .
PHYSICS . . . .	Laws and Properties of Matter and Heat, minor . . . . .	Dr. Mackenzie	. 5 .	. 23 .	. . . .
	Electricity and Magnetism, Light and Sound, minor . . . . .	Drs. Mackenzie and Buckingham	. 5 .	. . . .	. 21 .
	Laboratory Work, minor . . . . .	"	. 4 .	. 23 .	. 21 .
	Theory of Heat, Theory of Light, Theory of Sound, major . . . . .	"	. 5 .	. . . .	. 1 .
	Laboratory Work, major . . . . .	"	. 5 .	. . . .	. 1 .

*Tabular Statement of the Courses of Instruction given in 1897-98,  
continued.*

DEPARTMENT	COURSE	INSTRUCTOR	HOURS WEEKLY	NO. IN CLASS	
				1ST SEM.	2ND SEM.
PHYSICS . . . .	<i>Graduate Classes</i>				
(continued)	Physical Optics . . . . .	Dr. Mackenzie	3	2	2
	Thermodynamics . . . . .	Dr. Buckingham	2	1	1
CHEMISTRY . .	Introduction to General Chemistry (Lectures), minor . . . . .	Dr. Keiser	5	24	
	General Chemistry, minor . . . .	"	5		24
	Laboratory Work, minor . . . . .	"	5½	24	24
	Organic Chemistry, major . . . . .	Dr. Kohler	2		4
	Theoretical Chemistry, major . . .	"	3		3
	Advanced Organic Chemistry, post- major . . . . .	"	3		6
	Theoretical and Physical Chemistry, post-major and graduate . . . .	Dr. Keiser	5	8	
	Historical Development of Chem- istry, post-major. . . . .	"	1		5
	<i>Graduate Classes</i>				
	Advanced Chemistry . . . . .	"	5	4	
	Progress in Chemistry in the Nine- teenth Century . . . . .	"	1		4
GEOLOGY . . .	General Geology . . . . .	Dr. Bascom	2	17	17
	Laboratory Work . . . . .	"	2	17	17
	Field Work . . . . .	"	3-4	17	17
BIOLOGY . . .	Lectures on General Biology, minor	Drs. Morgan and Randolph	5	49	
	Lectures on Plants, Vertebrates and Embryology, minor . . . . .	Drs. Morgan, Warren and Randolph	5		47
	Laboratory Work, minor . . . . .	Drs. Morgan and Randolph	5½	49	47
	Animal Physiology, major . . . .	Dr. Warren	5	10	
	Laboratory Work, major . . . . .	"	5½	10	
	General Zoology, Theoretical Biol- ogy, major . . . . .	Drs. Morgan and Warren	5		4
	Laboratory Work, major . . . . .	"	5½		4
	Lectures on Embryology, post-major	Dr. Morgan	1	11	
	Lectures on Central Nervous Sys- tem, post-major . . . . .	Dr. Warren	1	7	8
	Laboratory Work, post-major . .	"		4	5
	<i>Graduate Classes</i>				
	Morphology . . . . .	Dr. Morgan.	1	4	4
	Morphological Laboratory Work . .	"		4	4
	Physiology . . . . .	Dr. Warren	1	3	3
	Physiological Laboratory Work . .	"		2	2
	Journal Club . . . . .	Drs. Morgan, Warren and Randolph	1 hour fortn'ly.	4	4
	Seminary Work . . . . .	"	1 hour fortn'ly.	4	4



IX.  
*Comparative Statement of the Distribution of Students in the various Departments of Study  
during the twelve years from 1885 to 1898.*

	Sanskrit and Com- parative Philology.	Greek.	Latin.	English Literature.	Anglo-Saxon.	German.	Teutonic Philology.	French.	Romance Philology.	Italian.	Spanish.	Semitic Languages and Biblical Literature	History.	Political Science.	Philosophy.	History of Educa- tion and Pedagogy.	History of Art.	Mathematics.	Physics.	Chemistry.	Geology.	Biology.
1885-86,	. .	30	18	32	. .	7	. .	10	1	2	. .	. .	8	. .	. .	. .	. .	32	. .	10	. .	10
1886-87,	1	20	24	39	. .	17	1	3	2	. .	2	. .	15	. .	19	. .	. .	29	. .	6	. .	22
1887-88,	1	28	36	39	3	42	4	25	2	2	4	. .	. .	13	45	. .	. .	12	11	16	. .	25
1888-89	2	40	35	67	7	50	4	26	. .	. .	1	. .	63	17	16	. .	. .	23	10	10	. .	27
1889-90,	6	46	58	76	9	44	4	21	. .	1	1	. .	34	24	20	. .	. .	28	7	11	. .	26
1890-91,	1	42	59	86	6	46	3	23	. .	4	1	. .	54	30	16	. .	. .	35	6	24	. .	26
1891-92,	2	36	75	92	8	46	1	28	1	5	1	. .	46	40	28	. .	12	24	7	31	. .	42
1892-93,	4	38	45	135	10	60	2	30	1	8	4	4	57	54	28	. .	19	27	27	45	. .	42
1893-94,	4	44	80	156	15	71	3	50	1	10	5	7	53	70	52	. .	. .	32	20	45	. .	47
1894-95,	5	51	91	170	10	75	6	83	5	8	9	12	86	53	57	. .	. .	34	20	71	. .	53
1895-96,	3	47	90	179	17	63	11	75	5	8	. .	9	85	49	67	. .	75	34	16	73	9	84
1896-97,	8	49	100	185	9	74	5	55	4	14	6	13	99	63	79	34	64	33	18	48	3	60
1897-98,	2	56	104	194	5	66	1	70	4	18	4	17	80	84	85	. .	21	48	26	35	17	69

## X.

*Report for the academic year ending June 2nd, 1898, compiled from the statements submitted to the president of the College by the instructors in the various departments.*

### *Sanskrit and Comparative Philology.*

Dr. Hermann Collitz conducted a graduate course in advanced Sanskrit which was attended by two graduate students for one hour weekly throughout the year. The hymns selected from the 1st, 3rd and 4th books of the *Rig-Veda* in Lanman's *Sanskrit Reader* were read by the class and interpreted with regard to the more recent literature on the subject. The reading was preceded by a brief introduction to the study of the Vedic literature.

### *Greek.*

Dr. Herbert Weir Smyth conducted the graduate course in Greek. The class met four hours weekly throughout the year. The subject was, Greek dialectal inscriptions. All the important inscriptions in Cauer's *Delectus* were translated by the class and commented on by the instructor. The part of the course devoted to Greek Epigraphy included a study of the archaic inscriptions in Roehl's *Imagines*; interpretation, by members of the class, of several important historical inscriptions in Hicks's *Manual*, and lectures on the history of archaic writing in Greece by the instructor. The study of inscriptions was furthermore illustrated by the use of the plaster casts recently acquired by the library of the Greek department. The fragments of Pindar were interpreted by the instructor; the *Pericles* of Plutarch and the *Wasps* of Aristophanes were studied. The poems of Bacchylides formed the basis of instruction for one hour a week during the second semester. The Fellow in Greek prepared a paper on the metre, dialect, and style of Bacchylides, and some of her work was published in the *Classical Review*. Each member of the seminary presented a critical interpretation of one of the odes of Bacchylides.

The Greek department calls attention to the utterly inadequate means of storing the classical library. The books are scattered and often inaccessible; the reading-room is ill-adapted to the use of the graduate students; there is no place for the plaster casts of inscriptions. The work in the classical department is crippled because of the lack of a proper library building.

The post-major, major, minor, and elementary undergraduate courses were conducted by Dr. Herbert Weir Smyth, Dr. Mortimer Lamson Earle, Dr. Wilmer Cave France, and Dr. George Amos Barton.

Dr. Smyth read, with the post-major class, selections from the lyric poets during the first semester and selections from Pindar during the second semester. The class met two hours weekly. Dr. Earle gave a post-major course of two hours weekly on Demosthenes's *De Corona* during the first semester, and on Aristophanes's *Clouds* and *Birds* during the second semester. He also gave a post-major course of one hour weekly in which selections were read from Lucian during the first semester, and Euripides's *Hippolytus* was read during the second semester.

Dr. Barton conducted a post-major class in New Testament Greek one hour weekly throughout the year. As in previous years the characteristics of the dialect of the New Testament were outlined and the syntax of New Testament Greek was studied throughout the course. The principal work of the year was devoted to a critical comparative reading of the Synoptic Gospels in order to gather material for the solution of the Synoptic problem. In connection with this work the new *λόγια*, discovered by Messrs. Grenfell and Hunt, in Egypt, about a year ago, and published by them, were read and interpreted. In connection with the Passion and Resurrection the parallel narratives in John were read, as well as the fragment of the Gospel of Peter discovered in 1892. In addition to a careful exegesis of the passages read, the course afforded an opportunity for practise in literary criticism.

With the major class, which met three hours weekly throughout the year, Dr. Earle read, in the first semester, Sophocles's *Œdipus Tyrannus*, *Antigone*, and *Œdipus Coloneus*, the last rapidly; in the second semester he read Demosthenes's *Olynthiacs* and *Philippics I—III*, and Plato's

*Protagoras*, the last also rapidly. The course was pursued by eight students. In the first semester written translations were twice handed in by the class, the object being to improve the English used by the students in translating. The results were fairly satisfactory. Dr. France met the major class, of eight members, in Greek Literature two hours weekly throughout the year. The lectures were devoted to the works of the chief Greek writers from Homer to Lucian. The textbooks used were Mure's and Mahaffy's histories of Greek Literature; parallel reading of essays dealing with individual authors, and, in some cases, of the original Greek, was frequently assigned. The attendance was regular and the work done, as tested by the papers, was very satisfactory.

Dr. Earle met the minor class in Greek three hours weekly throughout the year. Two hours weekly were given to Greek authors and one to Greek Prose Composition. During the first semester eight orations of Lysias and Plato's *Apology* were read, and exercises for translation into Greek prose in the style of Lysias were set; in the second semester Euripides's *Alcestis* and *Medea* were read, and outlines of the *Alcestis* and of several other plays of Euripides were rendered into Greek prose. Thirteen students attended this course during the first semester, fourteen during the second semester. Dr. France met the minor class, of fourteen members, twice weekly throughout the college year. In the first semester the *Iliad* (books I, II, V, VI—IX, and selected passages from the later books) was read; in the second semester the *Odyssey* (books I—IV and XI—XII). The class acquired considerable ability to translate at sight, and special attention was paid to the English style of the translations made in the class-room.

The elementary course in Greek was conducted by Dr. Earle for five hours weekly throughout the year. White's *Beginner's Greek Book*, Xenophon's *Anabasis*, books I—III (with the exception of about a chapter), Xenophon's *Hellenica*, book I and part of book II, and Homer's *Iliad*, books I, II (omitting the "catalogue of the ships") and part of III, were read. Nine or ten students attended the course regularly, and five hearers attended during part of the year.

*Latin.*

Dr. Gonzalez Lodge conducted the graduate work in Latin for four hours weekly throughout the year. Two hours weekly were given to a lecture course on Roman Satire, beginning with the earliest attempts at satiric composition and closing with Juvenal. The same subject was treated six years ago, but the literature that has appeared since then and the necessary enlargement of the course from one to two hours have made the course practically a new one. In connection with these lectures the students met in the seminary one hour weekly to interpret selected passages from Horace and Persius and prepared and read papers during the first semester on the Greek studies of Horace, Horace's relation to Menippus, Horace's estimate of earlier poets, and the value of the Cruquian MSS. in the formation of the text of Horace. During the second semester studies were made of the use of the infinitive in Petronius, the use of temporal clauses in Petronius, and the metrical peculiarities of the verse passages in Petronius; and a study of conditional sentences in the younger Pliny, begun last year, was continued. Dr. Lodge also delivered a course of lectures one hour weekly throughout the year on the syntax of the cases, treating the subject both theoretically and historically.

The post-major, major, and minor courses were conducted by Dr. Lodge and Dr. Gordon J. Laing.

Dr. Lodge met the post-major class two hours weekly throughout the year. During the first semester four plays of Terence, the *Andria*, the *Adelphæ*, the *Heauton Timorumenos*, and the *Phormio* were read; during the second semester four plays of Plautus, the *Captivi*, the *Menaechmi*, the *Rudens*, and the *Trinummus*. It was an interesting fact, brought out in connection with the Plautus course, that the students had, with but few exceptions, never read Shakespeare's *Comedy of Errors*, and were consequently unable to draw a comparison between that play and the *Menaechmi* of Plautus. Dr. Laing conducted two post-major courses, one of three hours weekly throughout the year, in which Lucretius was read in the first semester and Lucan and Seneca in the second semester; and one of one hour weekly throughout the year, in which Vergil's *Georgics* were read

in the first semester and Catullus in the second semester. In the post-major course in Lucretius, the first, third, and fifth books of the *De Rerum Natura* were read, with selections from the other books. While it was thought best not to spend too much time on the details of the Epicurean philosophy, the students were expected to know the main principles of the system, and occasional lectures on the atomic theory and other important doctrines were interspersed. Passages of striking literary merit were submitted to analysis. The influence of Lucretius on different English poets was investigated, and parallel or imitated passages were pointed out. In the second semester the first and seventh books of Lucan's *Pharsalia* and two of Seneca's tragedies, the *Medea* and the *Hercules Furens*, were read. Though both are authors of second rank, they are, especially Seneca, well adapted for class-reading and valuable as examples of the tendencies of later Latin literature. In the one-hour post-major course the work in Vergil was not wholly satisfactory. The subject matter of the *Georgics* did not appeal to the students. More interest was shown in Catullus.

In the free-elective course on Etruscan and Roman Archæology, given by Dr. Laing for two hours weekly during the second semester, such subjects were treated as the probable origin of the Etruscans, their architecture, sculpture, and especially the paintings in the tombs. The greater part of the semester was, however, given to the study of Roman remains, special attention being paid to Roman architecture. Four or five lectures were given on Roman domestic architecture and wall painting, as seen in Pompeii. At the end of the semester a few lectures were given on the transformation of Rome from a pagan to a Christian city, and the influence of Roman upon Christian forms of architecture. Martha's *L'Art Etrusque*, Lanciani's *Ancient Rome in the Light of Recent Discoveries*, and Middleton's *Remains of Ancient Rome* were used for private reading, but the work of the class was seriously hampered by the lack of books, and a substantial addition to the archæological library is necessary. Four illustrated lectures were given, but the only slides that could be procured had been made for popular lectures and were not satisfactory. A special set of slides similar to those now in use at many colleges would add much to the effectiveness of the course.

Dr. Lodge met the major Latin class three hours weekly throughout the year. The course was the same as in previous years except that the reading of the *Satires* of Horace was dispensed with and more reading in Juvenal substituted. Dr. Laing met the major class in Latin Literature two hours weekly throughout the year. During the first semester the lectures dealt with the writers of the Republic; during the second with the Augustan and Neronian literature. The chronological sequence was followed closely enough to show the different phases through which Roman literature passed, but the principal work of the class, in both semesters, was concentrated upon a few authors. The students were provided with complete texts, and after a few lectures characterising the work of the author under consideration, some time was devoted to the study of illustrative passages. These were assigned from day to day and discussed in the class. For the most part the lecturer acted as interpreter, but from time to time members of the class were called upon for translation, analysis, or criticism. Lucretius, Vergil, and the Roman Elegiac poets, Tibullus, Propertius, and Ovid, were among the authors that received most attention. The prose writers were passed over more quickly. No text book was used, but assignments of selected essays were made for the students' private reading from the works of Sellar on the poetry of the Republic and of the Augustan Age, Tyrrell's *Lectures on Latin Literature*, Nettleship's *Collected Essays*, and Mackail's *History of Latin Literature*.

Dr. Lodge met the minor Latin class three hours weekly throughout the year and read with them the same authors as in previous years, namely, Livy, the march of Hannibal; and Cicero, the second *Philippic*. Dr. Lodge reports that owing to the size of the class it has been impossible for him to read the exercises written weekly by the members, and accordingly the students have had to correct their own exercises during the class from such assistance as they could get by the discussion of the exercise in the class-room. In the reading course also it has been found impossible to do the amount of individual teaching which a language always requires. These difficulties will increase with the increase in the number of students. They could be lessened by dividing the classes, but this would make it impossible for

all the students to come under the instruction of the head of the department. Dr. Lodge would suggest that there be appointed a reader in Latin, whose business it shall be to read the exercises written by the members of the class and to have regular hours for seeing the class in small sections for discussing the exercise and explaining individual mistakes. The same reader could hold quizzes, and examine the papers written during these quizzes, and so bring home to each individual her shortcomings. In other words, to render the teaching of the minor Latin effective some such system should be employed as is done in the English department. In this way probably the difficulty of handling large classes (the present minor had sixty members) may be met for some time at least.

Dr. Laing met the minor Latin class in Horace two hours weekly throughout the year. By way of introduction to the study of Horace's *Odes*, some lectures were given pointing out the conditions under which he worked, his relation to Greek models, his ideals as a lyric poet, and his influence on later English literature. In the recitations that followed three things were emphasised: the correct reading of the Horatian metres, an adequate translation into good English, and a careful interpretation of each of the odes, with special reference to points of style and literary form. During the latter part of the second semester the class was occupied with the *Eclogues* of Vergil.

### *English.*

The graduate work in English was conducted by Dr. Mary Gwinn, Dr. James Douglas Bruce, and Dr. Alfred Hodder.

Dr. Gwinn met a class composed of graduate students in English Prose Writers of the Eighteenth Century twice weekly throughout the year. The authors chosen were Swift, Steele, Addison, Temple, Shaftesbury, and Bolingbroke. Because of the large amount of reading assigned and the full reports required of each student the course was counted as equivalent to a course of five hours weekly.

Dr. Bruce conducted a graduate course in Anglo-Saxon Grammar during the second semester. The course was intended



as an introduction to the study of Early English, and consisted mainly of the reading of selections from the chief Anglo-Saxon prose texts.

Dr. Hodder met a graduate class in the early English Drama two hours weekly throughout the year. The first semester was devoted to the pre-Shakespearian drama and the second to Shakespeare's successors from Jonson to Shirley. A graduate course in the Development of the Modern English Novel, dealing with the influence of Eliot, Browning, and Meredith on English fiction, was also given by Dr. Hodder.

Dr. Gwinn met the major class, composed of undergraduate students, graduate students, and hearers, in Modern English Prose Writers three times weekly throughout the year. The authors chosen were Burke, Carlyle, and Ruskin. Dr. Hodder lectured to the same class two hours weekly throughout the year on Eighteenth Century Poets. The poets were studied in their relation to the main currents of thought in the eighteenth century, and the reaction against the later Jacobean mannerisms was traced from Waller to Gray.

Dr. Bruce met those of the major class who preferred work in English language three times weekly throughout the year. The work of the class consisted for the most part of the reading and interpretation of representative poetical texts of both the Anglo-Saxon and Middle English periods. During the first semester *Andreas* and the Cadmonian *Exodus*, and during the second semester parts of *Layamon*, *Sir Gawain and the Green Knight*, *The Adventures of Arthur*, *Rauf Coilyear*, and other pieces, were studied in this manner.

Dr. Bruce met the minor class of the English language group five hours weekly throughout the year. Bright's *Outlines of Anglo-Saxon Grammar* and a majority of the selections in the accompanying reader were studied during the first semester, also *Judith*, and parts of *Genesis*. During the latter part of the semester the class was practised in the scansion of the alliterative verse according to Sievers's system as expounded in lectures accompanying the reading. In the second semester about one-third of *Beowulf* was read and lectures were given on the elements of myth, saga, and history contained in the poem. The

rest of the semester was devoted to Chaucer, Langland, and *William of Palerne*—the last-named as a specimen of the metrical romances.

The lectures on literature in the required English course were delivered by President Thomas and were attended by 153 students in the first semester and 141 students in the second semester. On account of the size of the class and the pressure of the President's other duties, it was decided to try the experiment of dividing it into four sections for the weekly quiz. Miss Kirk, Miss Donnelly, Miss Potts and Miss Hopkins each took the direction of one of the quiz sections. In order to test the experiment fairly this method was persisted in throughout the year, although the results of the examinations of the first semester and the lack of interest manifested by the students as compared with that shown in previous years soon convinced both the lecturer and the quiz directors that a course so managed could not but compare most unfavourably with the other courses given in the college where the lecturer himself quizzed his classes, or with the course in English Literature as given in other years. The experiment was tried under unusually favourable conditions; all the four quiz directors had themselves followed the course in General English Literature in previous years, were thoroughly familiar with the subject matter, and were teachers of experience, one having read the lectures on English Literature to the class in the preceding year and having herself quizzed successfully on these lectures. As the lecturer had repeated the same course, including the conduct of the weekly quiz, five times in previous years she was able to compare accurately the results of the two methods of instruction, and reached the conclusion that the above method of providing for increase of numbers, although made use of in many colleges, should be avoided in future if Bryn Mawr College is to maintain its present high standard of instruction. The first-year essay work was conducted as in the previous year by Dr. Gwinn, Miss Donnelly, Miss H. W. Thomas, Miss Potts, Miss Hopkins, and Miss Hoyt; eighty-three students were registered in the first semester and eighty-one in the second. The second-year essay work was reorganised, the class being divided into two sections of about twenty-five students each. In order to ensure more careful preparation in

the construction of long essays each student was required during the year to study one author under the direct supervision of the instructor, a particular aspect of the author's work being assigned for consideration and the student being given careful instruction as to the methods of selecting her material and preparing her subject matter. The work was conducted by Miss Kirk and Miss H. W. Thomas, under the supervision of Dr. Gwinn.

A new course in Descriptive Essay Writing was offered for the first time by Miss Donnelly and Miss H. W. Thomas to graduates and undergraduate students who had completed the essay work of the first and second year in the course in General English. The class met twice weekly for discussion of the papers written weekly by each member of the class. So much interest was manifested in the course that it will be repeated next year and will become part of the regular essay work of the college.

Agnes Frances Perkins, of New York City, was the George W. Childs prize essayist of the year.

### *Teutonic Philology.*

Dr. Hermann Collitz conducted a graduate course in Old High German for two hours weekly throughout the year. The grammar was studied in comparison with both Gothic and the later stages of High German (*i. e.*, Middle High German and Modern German). The grammatical part was followed by the reading of selections from Old High German Prose, especially from Tatian and Isidor, and of the *Hildebrandslied*.

Dr. Max F. Blau conducted a graduate course in Middle High German for two hours weekly throughout the year. In the first semester an abstract of Middle High German grammar was given and a large part of Hartman's *Der Arme Heinrich* was read. In the second semester a brief account of the "Nibelungenfrage" and of the MSS. of the Nibelungenlied was given, and a large part of the Nibelungenlied was read.

### *German.*

The post-major, major, and minor courses in German were conducted by Dr. Hermann Collitz, Dr. Max F. Blau, and Miss Rose Chamberlin.

Dr. Blau met a post-major class in Contemporary German Literature two hours weekly throughout the year. The course consisted of lectures and reading; special attention was paid to the German drama. Sudermann's *Die Ehre, Die Heimat, Frau Sorge*; Hauptmann's *Einsame Menschen, Hannele, Die Versunkene Glocke* were read. Miss Chamberlin conducted a post-major class in German Syntax, advanced reading and composition two hours weekly throughout the year. Three students attended during the first semester and four during the second and did excellent work. Advanced prose compositions were handed in at each lecture and discussed after correction. Twenty minutes weekly were spent in reading and the same time in writing prose composition at sight. In each semester each student gave one lecture in German on some grammatical subject.

The major class in German read selections from the second part of Goethe's *Faust* with Dr. Collitz one hour weekly throughout the year. Dr. Blau lectured in German to the same class two hours weekly throughout the year on the history of German literature from the earliest times to the end of the fifteenth century. One hour weekly the class read with Dr. Blau, in connection with these lectures, specimens of Old and Middle High German epic and lyric poems in Modern German translations, selected from Hentschel's *Handbuch der Deutschen Literatur*. The private reading in the major class was: Lessing's *Minna von Barnhelm* and *Nathan der Weise* for the first semester, Scheffel's *Ekkehard* and Keller's *Dietegen* for the second semester. The major class also met Dr. Blau one hour weekly for practice in German prose composition.

In the minor class lectures were given in German by Dr. Collitz two hours weekly throughout the year, on the history of German literature from the middle of the last century to Goethe's death. In connection with these lectures selections were read, one hour weekly, from Weber's *Lesebuch zur Geschichte der Deutschen Literatur*. The same class met Dr. Blau two hours weekly throughout the year. Half the time was given to reading the first part of Goethe's *Faust* and the other half to exercises in prose composition. The private reading in

both the major and minor courses was the same as in the previous year.

Miss Chamberlin conducted the elementary course in German five hours weekly throughout the year, one hour weekly being given to a quiz. In addition to the usual amount of grammar the class read, both as prepared work and at sight, a great deal of easy German. Among the books read were Freytag's *Die Journalisten*, H. Grimm's *Raphael und Michael Angelo*, Heine's *Harzreise*, Seidl's *Leberecht Hützmacher* (selections).

A class in German Conversation, attendance on which was optional even for students in the minor and major courses, was held one hour weekly by Miss Chamberlin. This class met somewhat irregularly. This work does not count towards a degree, which doubtless accounts for the uncertain attendance.

### *French.*

The graduate work in French was conducted by Dr. Joseph Auguste Fontaine and Dr. Louis Emil Menger.

During the first semester Dr. Fontaine delivered two courses of lectures of one hour weekly to graduate students. The subject of the first course was the *Chanson de Geste*; its origin, and developments, its imitation abroad, and its influence on the literature of the middle ages were successively treated. The reading done in connection with the lectures was selected mostly from the *Chansons de Geste* belonging to the *cycle royal*. The students were referred to special articles by Paul Meyer, Léon Gautier, Gaston Paris, Pio Rajna and Nyrop concerning the origin of French epic poetry and early French versification. The second course of lectures treated exclusively Old French Syntax, special attention being paid to the origin and use of the definite, indefinite, and partitive articles, the place and comparison of adjectives, the use and place of disjunctive and conjunctive personal pronouns and to modes and tenses. Constant references to Latin and early French texts were made. A course in literature was also offered by Dr. Fontaine to graduate and post-major students, one hour weekly during the first semester. The subject selected was the romantic drama and the modern French comedy. The works of De Vigny, Hugo, Musset, Dumas, and Augier were read and the dramatic theories of these writers discussed. No

special investigations were made by the students, who had first to become acquainted with the works of the dramatists and read the abundant articles and essays written on them.

Dr. Menger organised the graduate work in the department of Romance Philology as follows: the first year's work is to be devoted to a general introduction to the history of the science of Romance Philology and to the detailed study of Old French Philology. After acquiring the method of philological investigation necessary to an understanding of Old French, the students will be prepared to take up, as more advanced work, the philology of the other Romance Languages, for which the material is not so abundant as for Old French. This will lead up to seminary work and to original research. The Romance language Journal Club, consisting of all the advanced students in the department, met one hour weekly throughout the year and reviewed numbers of recent important books and journals; during the first part of the year Koerting's *Handbuch der Romanischen Philologie* was studied with a view to the publication of the results of the criticism of the club by the instructor. A course of one hour weekly throughout the year in French Physiological Phonetics was conducted mainly as an introduction to the course on historical French Phonetics in order that physiological changes referred to in the latter as taking place in the early stages of the development of French might appeal more clearly to the student when compared with the phonetic tendencies of the French of to-day. A review of general phonetics was also given. An important course on Old French Phonology and Morphology was given two hours weekly throughout the year. The work consisted of lectures on the historical development of modern French sounds and forms from popular Latin through Old and Middle French. Some time was devoted to general discussion by the students and the instructor of points involved in the lectures and about one hundred lines of the *Vie de St. Alexis* were examined critically. The course of two hours weekly throughout the year on Old French Readings began with a study of the earliest texts, as well as of a number of selections from later ones published in Constans's *Chrestomathie*; the following separate editions were taken up and read in full: *Vie de St. Alexis* (Ed. Paris), *Extraits de la Chanson de Roland* (Ed. Paris),

*Aucassin et Nicolette* (Ed. Suchier), *Voyage de Charlemagne* (Ed. Koschwitz), and *Fables de Marie de France* (Ed. Waenke).

Dr. Fontaine, Dr. Frederic M. Page, and Miss Rose Chamberlin were in charge of the undergraduate work in French.

The post-major students met Dr. Fontaine once weekly and read critically three of Musset's dramas and comedies and also *Les Corbeaux* of Henry Becque.

The work in major French was conducted by Dr. Fontaine. In literature, the students were given the same course of lectures on classical writers as in the previous year, except that the analysis of the works of Pascal, La Bruyère and La Rochefoucauld took a considerable amount of time, and as a result of this the number of lectures delivered during the second semester on modern French poetry was necessarily lessened, only ten lectures being given on Leconte de Lisle, Sully Prudhomme, François Coppée, and José de Hérédia. The usual number of lectures on Sainte Beuve, Taine, and other modern French critics was likewise given this year. Three hours weekly were devoted to major French syntax and idioms, critical reading of classical and modern French poets and prose writers, and to practise in French conversation on subjects left entirely to the students' own choice.

In the minor course Dr. Fontaine lectured two hours weekly throughout the year on nineteenth century French literature, the period covered by his lectures extending from the year 1800 to 1850. The work of the first semester was devoted to the importance of the Romantic movement, the investigations of the causes that led to it, and its achievement in the different domains of literature, poetry, drama, fiction, and criticism. Then the strong reaction against romanticism that followed was taken up and studied in its causes and results. It was shown that Gautier's *España* and *Emaux et Camées* pointed to a new direction in French poetry and that Balzac's novels prepared the way for the realistic school of novelists and dramatists. In comparing this year's report with that of last year it will be noticed that the writers of the eighteenth century were not touched on. It was found impossible to cover as much ground this year as had been done previously, without impairing the excellence and thoroughness of the work of the class. It should be added, as a partial explanation for this lesser activity on the part of both instructor

and students, that ten minutes were devoted at the beginning of each lecture to reading aloud some passages of difficult French and to translation from dictation. Better preparation on the part of some of the students would have rendered this innovation, which is entirely foreign to a course on literature, unnecessary. The critical reading, illustrative of the instructor's lectures, was most faithfully done and reported upon. Dr. Page met the minor class, averaging about thirty students, three hours weekly throughout the year. The following works were read and translated in class with grammatical criticisms: Gautier's *Scenes of Travel*, selections of short stories by Daudet, Coppée, Alfred de Musset and About; Alfred de Musset's *Un Caprice*, *On ne badine pas avec l'amour*, *A quoi rêvent les jeunes filles*. As class work supplemented by private reading, selections from V. Hugo's prose and poetical works were read and *Ruy Blas*, Loti's *Le pêcheur d'Islande*, and *Mlle. Solange*. Selections from modern French authors were given as dictation once weekly, and once or twice weekly class compositions based on these. During the first semester forms were studied in Macmillan's second year French course, and syntax during the second semester. Exercises in composition from Macmillan's first course were handed in once weekly and the corrections afterwards explained in class. Owing to the lack of time it was impossible to give much attention to practise in conversation.

The elementary French class, consisting of about ten students, met Miss Chamberlin five hours weekly throughout the year, one hour weekly being given to a quiz. The usual rudiments of grammar were gone through and a satisfactory amount of reading, both prepared and sight-reading, accomplished. The standard in reading was high. In addition to elementary works the class read the most of Ohnet's *Maître de Forges*, Malot's *Sans Famille*, and Brunetière's *Nouveaux Essais*.

#### *Italian and Spanish.*

The work in Italian was conducted by Dr. Louis Emil Menger and that in Spanish by Dr. Frederic M. Page.

Dr. Menger conducted a graduate course in Italian Philology one hour weekly throughout the year. This course was some-



what similar to that in Old French Philology. Several pages of the *Cento Novelle Antiche* were used as a basis for the study of old Italian forms. The Fellow in Romance Philology attempted a rearrangement of the treatment of the history of the consonants as given in Meyer-Lübke's *Grammatik*, and her work will prove a great aid to students in the future.

The major class in Italian met Dr. Menger two hours weekly during the first semester and three hours weekly during the second semester. The first semester was devoted to a study of Italian poetry previous to Dante, special attention being paid to the many questions involved in the literary history of the early Sicilian school and to French and Provençal influence on the poetry of the origini. The lectures on this period were accompanied by the reading of selections from nearly all the poets spoken of in the lectures; the text-book used was Monaci's *Crestomazia*. The second semester was devoted entirely to Dante's *Divina Commedia*. All of this was read in class with the exception of about six cantos of the *Purgatorio* and ten of the *Paradiso*.

The minor class met three hours weekly throughout the year. The work consisted of the reading of modern texts, and grammar and composition, the latter being continued once weekly throughout the year. At the end of the second semester a few cantos of the *Inferno* were translated.

A special course in Spanish was given by Dr. Page two hours weekly in place of the ordinary major course. De Castro's *Las mocedades del Cid*, Part I.; Calderon's *El principe constante*, *Casa con dos puertas*, and *El Alcalde de Zalamea*; Lope de Vega's *La estrella de Sevilla*, *La boba para los otros y discreta para sí*, *Por la puente*, *Juana*, *El major imposible*, and Galdós's *Doña Perfecta* and D. Diego Hurtado de Mendoza's *Lazarillo de Tormes* were read; also chapters on Cervantes, Lope de Vega, and Calderon from Ticknor's *Spanish Literature*.

The class in minor Spanish met Dr. Page four hours weekly throughout the year. The following books and extracts were read: Knapp's *Reader*, *El Barómetro*, one volume of stories by Trueba, three chapters of *Don Quixote*, Galdós's *Doña Perfecta*. Knapp's Grammar was studied and the students were given practise in original compositions and in dictation.

*Semitic Languages and Biblical Literature.*

The work in this department was conducted by Dr. George A. Barton.

The Assyrian Seminary met one hour weekly throughout the year for the study of Old Babylonian poetry. This work was a continuation of that begun in the year 1896-97, and consisted of a critical study of Cantos IV—XII of the *Gilgamish Epic*. The fragmentary texts were studied in detail in the very satisfactory edition of Haupt, and after a full study of the interpretations of others an independent interpretation was made.

A course in Advanced Hebrew was given two hours weekly throughout the year. In this class the time was equally divided between syntactical study with sight reading and critical interpretation. The class read at sight during the first semester the first twelve chapters of I. Samuel, noting as they read the data for the analysis of the book into its original documents, and in the same manner during the second semester the first twelve chapters of Exodus. The book selected for critical interpretation was Isaiah, and the portions interpreted during the year were Isaiah I—XII and XL—LVIII. Hebrew syntax and prose composition were studied throughout the course.

In Biblical Literature the following courses were given:

A course on the History of Religious Ideas in the Bible was given two hours weekly throughout the year, and the instructor traced in lectures the unfolding in the Bible of the ideas of God, subordinate supernatural beings, the nature of man, sin, atonement, righteousness, punishment, and the parousia. The discussions were made as complete as possible by the use of the Jewish literature between the Old and New Testament periods, and by the comparison of the religious ideas of other Semitic nations. Reports on readings in the best modern works on Semitic religion and Biblical theology were frequently made to the class by its members, and each member of the class conducted in connection with the works an independent investigation, the results of which were embodied in a thesis.

A class in the History of Israel met twice weekly throughout the year. The place of Israel in the family of Semitic nations was outlined, and the beginnings of the nation as shown in their traditions and in archæological material recently discovered, were

studied. Beginning with the period of the Judges, each of the historical books was analysed into its original documents, parallel narratives, where such were shown to exist, were compared and the history reconstructed in the light of the evidence most nearly contemporary with the events described. This method was followed as long as the nature of the historical material of the Old Testament made it possible. From the Babylonian exile to the destruction of Jerusalem in 70 A. D., the outlines of the history were reconstructed from scattered Biblical material, from Josephus, the Books of the Maccabees, from Tacitus, etc. Readings were assigned throughout the course in the best modern literature on the subject, such as the works of McCurdy, Stade, Wellhausen, Kittel, Renan and Schürer.

A course on Old Testament Prophets, given one hour weekly throughout the year, was substantially the same as the course given in the previous year.

A course on Hebrew Poetry was given one hour weekly during the first semester. It differed from the similar course given in the previous year in that less stress was laid on the lyrics scattered through the historical books, and more on such books as Proverbs, Canticles, and Lamentations.

The course on Pentateuchal Criticism met one hour weekly during the second semester and was practically a repetition of the similar course of last year. The class as a whole had had more experience in critical work so that the amount of reading accomplished in the literature of the subject was greater than last year.

The class in the Historical Outlines of Christian Thought met one hour weekly throughout the year and work similar to that done in former years in this course was accomplished.

A Journal Club was organised among the graduate students of the department at the beginning of the second semester. It met once fortnightly during the semester. At these meetings the most important articles in the current periodical literature of the subject were read and discussed.

Dr. Barton conducted the usual undergraduate course in Biblical Literature which meets one hour weekly throughout the year and forms part of the course in General Philosophy. Dr. Barton also conducted the usual course in Christian Ethics one

hour weekly for ten weeks of the second semester. These courses differed in no important respect from those reported last year.

### *History.*

The graduate and undergraduate courses in History were conducted by Dr. Charles McLean Andrews. In the graduate department Dr. Andrews lectured three hours weekly throughout the year. The first course on Historical Method and Criticism, two hours weekly during the first semester, was taken by five students; that on the history of the Roman Law, two hours weekly during the second semester, by five students; and that on the history of the community, one hour weekly throughout the year, by five students during the first semester and by six during the second. In connection with these courses a seminary was held once a fortnight for two hours for such of the graduate students as were competent to do independent work, and was attended by four students, each of whom at intervals presented reviews of articles in the journals, notices of books recently published, chiefly on English and American history, and the results of their own special investigations. By these students four subjects were treated: "The condition of women in the kingdom of Jerusalem during the Crusades;" "Evidence warranting the indictments of the King in the Declaration of Independence;" "Suitors at the Hundred and County courts in England during the thirteenth century;" and "the English coroner in the American colonies." The first and second of these papers were not carried to completion during the year, but the third and fourth were brought to a finished form and presented at the close of the year for the degree of Master of Arts. At the same time the department continued to supervise the work of the Fellow in History for 1894-95, who had spent the preceding year in Cambridge and London collecting material for her work on the manors of Ramsey Abbey. A portion of this paper was completed during the year and presented to the faculty for the degree of Doctor of Philosophy, which was conferred in June, 1898. It may be of interest to note that the dissertation of Miss Lord, who received the doctor's degree in June, 1896, was published during the winter of 1898, under the title of "Industrial Experiments in the British Colo-

nies of North America," as extra volume XVII. of the Johns Hopkins University Studies.

In the post-major course Dr. Andrews lectured two hours weekly throughout the year on American constitutional history to a class of eleven students. Special attention was paid to a comparative study of the colonial charters and state constitutions and to the derived features of the Federal constitution. The library is still inadequately equipped with material for detailed study, as the department possesses but few of the state histories and of the collections of colonial and state records. A special effort was made during the winter to complete the sets of government publications, particularly those relating to diplomatic and constitutional history, and it is hoped that this effort will result in additions to the library.

In the minor courses Dr. Andrews lectured five hours weekly throughout the year on Mediæval History to a class of nearly seventy students. Except for the omission of the essay work and the substitution in the second semester of the drop quiz for the set quiz the methods employed were the same as those adopted in previous years and the results attained were on the whole satisfactory.

### *Political Science.*

The work in this department was conducted by Dr. Lindley Miller Keasbey.

A graduate course on the Origin, History, and Theory of the State was given one hour weekly throughout the year. In connection with this course the Fellow in Political Science handed in a number of brief reports, drawn from secondary authorities, on the political organisation of certain typical savage tribes. During the second semester the Fellow worked up a longer report on the Transitions of British Sovereignty, referring in this case to works on English constitutional and economic history. The written work presented was satisfactory, though provisional in character and intended as an introduction to the more strictly graduate work planned for 1898-99. The lectures had also to be of a general character and were planned to serve as an introduction to the narrower lines of research outlined for the coming year.

The post-major courses were given, one in Descriptive Sociology three hours weekly throughout the year, and the other in Theoretical Sociology two hours weekly throughout the year. Written reports on the economics, the politics, and the religions of certain tribes of American Indians were required from the students in the descriptive course. In the theoretical course the students were required to report verbally on certain portions of Comte's and Spencer's sociology. Four students took the descriptive course and five the theoretical course. The work of the classes, written and oral, was satisfactory.

The History of Political and Economic Theory, the subject of the minor course, was given five hours weekly throughout the year. The class was large, eighty in all, and the lectures had to be frequently interrupted by oral quizzes in order to keep the students up to the work. The work of the class fully attained the standard set in previous years.

It is to be hoped that in response to the interest developing among the students in Political Science the department may be able to expand its facilities to meet the growing needs.

### *Philosophy.*

The work in this department was conducted by Dr. Dickinson Sergeant Miller.

The special work of the graduate course was in recent English logic and metaphysics as represented by the works of Mr. F. H. Bradley. This author's two chief treatises were examined and closely criticised. The minor course of three hours weekly throughout the year was devoted to the history of English ethics, with a philosophical introduction. For the latter purpose *Descartes* was used. The English moralists read were Hobbes, Locke, Shaftesbury, Mandeville, Adam Smith, and Mr. Leslie Stephen. The members of the class numbering six regular undergraduate students, one graduate student, and three hearers presented summaries, and in some cases criticisms.

Dr. Witmer's lectures during the first semester in the minor course were on Child Study. The title of this course did not limit the consideration of the phenomena of mental development to the period of childhood proper.

The course outlined the psychology of the human being during all the periods in which normal psychological progress manifests itself, and included problems of mental inheritance and phylogeny. The presentation of the data and theories of genetic psychology was given in the order suggested by the various methods that have been found available for the investigation of the developing psycho-physical organism. An illustration of each method was presented in the demonstration of the mental and physical characteristics of a particular child, and in the practical work of the student in collecting data and preparing reports of results. During the second semester the subject was modern psychological theory. This course consisted of lectures, supplemented by the reading of original sources covering such problems as are presented in theories of association and apperception; theories respecting the emotions; mental and physical parallelism; theories of subconsciousness, mental dissociation, and volition.

The supplementary individual laboratory work offered by Dr. Witmer in connection with these courses was taken by a limited number of students. As the result of the year's work one student handed in the collation of results obtained from a syllabus on imagination; a second made a report on a study of the time measurements of mental processes; and a third a similar study of the dermal senses. The reports were based on original work, and involved the statistical treatment of the results and a consultation of the literature of psychological experimentation.

The required course in General Philosophy by Dr. Miller began with psychology and continued with the history of modern philosophy, with ethics, and with logic. The class numbered about fifty-six and met four hours weekly throughout the year.

The books used were: W. James's *Psychology, Briefer Course*; J. Royce's *Spirit of Modern Philosophy*; J. S. Mill's *Utilitarianism* and *Liberty*; and Butler's *Sermons on Ethics*. Special reading was also assigned in other literature.

### *Mathematics.*

The graduate work was conducted by Dr. Charlotte Angas Scott and Mr. James Harkness. Dr. Scott lectured two hours weekly throughout the year on Elliptic and Hyperelliptic Curves

and systems of such curves. A great part of the course consisted of a detailed discussion of cubic and quartic curves; after sufficient attention had been paid to their properties to make their classification intelligible, they were treated with special reference to their elliptic and hyperelliptic character. This necessitated constant reference to the theorems and results due to investigations in geometry on a curve, and accordingly for some weeks the lectures were devoted to an outline account of this subject, following the lines of the principal Italian memoirs. Reading was assigned in Salmon's *Higher Plane Curves*, Clebsch's *Vorlesungen über Geometrie*, Plücker's *System der Analytischen Geometrie*, and in various memoirs in the *Mathematische Annalen* and other periodicals.

Mr. Harkness lectured on the theory of discrete groups. The lectures were given two hours weekly throughout the year; and in the first semester the Galoisian theory of equations was considered in detail and much attention was paid to Kronecker's work, more especially to the ideas embodied in the first half of his celebrated memoir *Grundzüge der Arithmetischen Theorie der Algebraischen Grössen*, and in the memoir by Molk in the sixth volume of the *Acta Mathematica*. Emphasis was laid on the importance of a thorough comprehension of what is contained in such terms as "realm of rationality," "adjunction," "the Galoisian imaginaries," etc. Galois's theory of groups was considered from many different points of view, and incidentally the ordinary theorems on permutation groups were established. Collateral reading was assigned, references being given more especially to the books of Burnside, Jordan, Netto, and Weber. In the second semester the lectures were concerned chiefly with the application of the group theory in the theory of elliptic modular functions. Time was found for the discussion of several other topics; for example, the simplification of spherical trigonometry that has been affected by the systematic use of the notion of the group of operations.

For various reasons it was found advisable to suspend the meetings of the Journal Club during the year. It is expected that the regular meetings will be resumed in the autumn.

There are one or two items of interest regarding students who were recently members of the graduate department that



may fitly find mention here. During the year three of our graduate students have been pursuing mathematical and physical studies at the University of Göttingen, viz: Miss E. N. Martin, elected to the Mary E. Garrett European Fellowship in 1897, holder of the resident Fellowship in 1895-6; Miss F. C. Gates, holder of the resident Fellowship in 1896-7; and Miss V. Ragsdale, to whom the Bryn Mawr European Fellowship was awarded in 1896. Miss F. Harcastle, holder of the resident Fellowship in 1894-5, was then and before then engaged in researches in the theory of point-groups on curves, which she is still carrying on; some results of her later work in the subject have been published during the year in two papers—"A Theorem concerning the Special Systems of Point-groups on a particular type of Base Curve" (Proc. Lon. Math. Soc.), and "Some observations on the modern theory of point-groups" (Bull. Am. Math. Soc).

Owing to the appointment of Dr. Isabel Maddison as Reader in Mathematics, it was found possible to offer five hours weekly of post-major work. Dr. Scott lectured two hours weekly throughout the year on Modern Analytical Geometry, closely following the text-book, Scott's *Introductory account of certain modern ideas and methods in Plane Analytical Geometry*. The matter included in this course is an indispensable preliminary to advanced mathematical study, and a request has been received that the subject be offered again during the coming year in the place of the Modern Pure Geometry already announced. As the students electing Mr. Harkness's post-major course of two hours weekly were all graduates, it seemed desirable to adopt a somewhat more advanced treatment than had been originally intended. The subject of elliptic functions was considered in the first place from the historical point of view; then followed an excursus on the theory of analytic functions; finally the theory of functions was used to develop Weierstrass's results. In the second semester the text-book used was that of Appell and Goursat. Dr. Isabel Maddison lectured once weekly throughout the year on Analytical Geometry of Three Dimensions. The lectures presupposed such knowledge of the elementary parts of the subject as can be acquired in the short time devoted to it during the second semester of the major course. Frost's *Solid*

*Geometry* and Smith's *Solid Geometry* were used as text-books, and in addition to the ground covered in these books a brief account of the general theory of complexes and congruencies was given.

The undergraduate classes, major and minor, were conducted in conformity with the program. In the second semester of the major course, the time was somewhat differently apportioned among the three subjects assigned, more than usual being devoted to the curve-tracing; consequently less than the usual amount of work was accomplished in Analytical Geometry of Three Dimensions. The only important modification in the minor course was the substitution of Lamb's valuable new book on the infinitesimal calculus for an inferior work previously in use.

The course in required trigonometry was given in the first semester by Mr. Harkness, and in the second semester by Dr. Maddison. The course in geometrical conics, successfully substituted for the course in solid geometry formerly offered, was given by Dr. Scott in the second semester. Now that the students have realised that the required mathematics finds its proper place in the first part of the college course, there is not the urgent desire there once was for the repetition of the lectures every semester. This, leaving Dr. Maddison more at liberty, has made it possible to arrange an entirely new course, in response to the representations of the department of physics. This auxiliary course, to be delivered by Dr. Maddison, will consist of three lectures weekly throughout the year on the parts of mathematics needed by students that wish to take the major course in physics without electing the minor course in mathematics.

### *Physics.*

The work in this department was conducted by Dr. Arthur Stanley Mackenzie and Dr. Edgar Buckingham.

Dr. Mackenzie lectured to a graduate class of two students on Optical Theories three hours weekly throughout the year. The theories of Fresnel, Neumann, and MacCullagh, Green, Cauchy, Kelvin, Rayleigh, and Clerk Maxwell were fully developed and compared. Special attention was given to Boltzmann's

treatment of Maxwell's electromagnetic theory of light. A course of lectures in extension of this course is offered for the coming year.

Dr. Buckingham gave a graduate course in thermodynamics two hours weekly throughout the year. The first semester was devoted to the development of the theory and the second semester to applications to physics and physical chemistry. The Fellow in Physics was the only student in the class and the course was more advanced and more satisfactory than ever before, owing mainly to her excellent preparation for the work.

The Journal Club met three times monthly and the Seminary once monthly. Papers were prepared and read on the general subject of radiations, including the passage of electricity through gases, Röntgen rays, and the optics of electromagnetic waves.

In the advanced laboratory the Demonstrator in Physics devoted her time to devising methods of producing the Spectra of sulphur and the sulphur compounds; considerable advance was made against great difficulties, and she seems now in a position to arrive at the required results. Her work has developed the great need of larger equipment of the physical laboratory for research work, and great additions to the stock of apparatus must be made if such work is to be done to the satisfaction of students or instructors. The Fellow in Physics spent the earlier part of the year in more or less routine work; she then took up the subject of the rate of vibration of a wire in various liquid media and spent the rest of the year on the investigation. She has found some interesting phenomena connected with the subject, and has published the results of her work in the "Physical Review" for August, 1898.

The workshop has been enlarged and improved, and a new and valuable lathe, just acquired, will materially increase the usefulness of this important adjunct to the laboratory.

During the year 1897-98 the course in major physics was given as outlined in the program. In the coming year, however, a change will be made in that course in consequence of the change in the minor course outlined below. Those divisions of the subject which have been left untouched in the minor course, or which have been given in a very incomplete way, will be taken up in the major class. The development of these subjects will

be mathematical, as before, but no previous special knowledge of the subjects will be assumed. This means that the lectures will not be entirely mathematical, as heretofore, but will be illustrated by experiments. This reduces the amount of ground covered by the minor and major physics course, but it is hoped this will be compensated for by the greater thoroughness with which the student has covered the ground, and that little change need be made in the post-major course.

In previous years the minor course in this department has consisted of an elementary treatment of the whole subject of physics, including the divisions mechanics, heat, light, sound, electricity, and magnetism. It has always been found difficult to cover so much ground in the manner desired in two semesters, and during the year 1897-8 a change has been made. It was thought desirable to try the result of going more slowly over a portion only of the whole subject, and leaving out the rest, or giving merely enough to enable the student to do the laboratory work satisfactorily. Accordingly the subject of light was not lectured upon at all, and only short courses were given on heat and electricity. Dr. Mackenzie devoted the time from October to Christmas to the general properties of matter and energy, developing the subject of mechanics, not so much from a mathematical standpoint, as in such a way as to bring out the great principles involved. Dr. Buckingham then gave a brief account of the divisions heat, mechanics of fluids, and sound; and during the last part of the year Dr. Mackenzie lectured on the subject of electricity, and especially electrostatics. The result of changing the course in this way has not been tried long enough to judge of its success.

The laboratory work of both classes was as usual under the direction of Dr. Mackenzie, Dr. Buckingham, and Miss Lowater. The minor class made an exceptionally good record for diligence and accuracy. The work was carried on very much as in former years, the main fault of the course being the lack of direct connection with the lectures and a lack of consecutiveness in the order of the experiments done. The latter can be remedied only by such duplication of apparatus as will make it possible for the whole class to work on the same experiment at the same time. Such a duplication has, of course, been impossible hitherto.

Nevertheless the work has been gradually somewhat improved during the last five years by adding to our stock extra pieces of such simple and inexpensive instruments as could be made by our mechanic, Mr. Banner, or the instructors. The original cost of even simple apparatus is the only hindrance to much more rapid progress in this direction.

In the coming year the mathematical department offers a course of lectures for those students who wish to take the major course in physics without electing the minor course in mathematics. This course has been very much needed, and it is a cause of great satisfaction to the department of physics that it is now to be given.

### *Chemistry.*

The work in this department was conducted by Dr. Edward H. Keiser and Dr. Elmer P. Kohler.

The graduate students in chemistry attended during the first semester a course of two hours weekly upon the Historical Development of Chemical Theory and a seminary course of one hour weekly upon selected topics in organic chemistry. In the laboratory these students were given exercises in preparing typical organic compounds, the object being to make them familiar with the methods and operations used in research work. One of the graduate students gave considerable time to quantitative analysis, and analysis of drinking water. These courses were conducted by Dr. Keiser.

In the second semester the graduates attended a two hour course by Dr. Kohler on special methods in Organic Chemistry, and a one hour course in Historical Chemistry by Dr. Keiser. In the laboratory they were engaged in work upon assigned problems. Researches have been carried on by the professors and students upon the following topics: The interaction of hydrogen and nitrous oxide in the presence of metallic palladium, also of hydrogen and nitric oxide under the same conditions. The transformation of engenol into iso- and di-isengenol and the constitution of the latter compound. The preparation and properties of the unsaturated sulphonic acids.

The class-room work of the post-major students was in the main the same as that of the graduate students. In the labora-

tory these students began with typical organic preparations, which were followed by analysis and special problems in organic chemistry.

Owing to the absence of Dr. Kohler in the first semester it was necessary to omit the major course. In the second semester a special major course was given by Dr. Kohler to students who required one semester's work in chemistry for their degrees. Two hours a week in this course were given to theoretical chemistry, the remaining three hours to lectures in elementary organic chemistry. In the laboratory each student was assigned special work in analytical or organic chemistry according to her needs.

In the minor course the general plan of work as outlined in the program was followed with the difference, however, that the lectures throughout the year were given by Dr. Keiser and one hour a week was devoted to reviews and quizzes conducted by Miss Heritage. The lectures and laboratory work were made strictly complementary. The work to be done each day was outlined, its object and scope defined in the lecture immediately preceding the laboratory exercise. Each student on coming to the laboratory found upon her table the materials required for the assigned experiments. As results of this system absences and irregularities of attendance were practically unknown, and four weeks were gained for lectures and laboratory work in organic chemistry.

### *Geology.*

The work of this department was conducted by Dr. Florence Bascom.

There were no graduate students in the department during the year. The undergraduate course in general geology was conducted for the first time as a minor course of five hours weekly throughout the year. This change necessitated some alterations in the character, and an increase in the amount, of instruction given in the department. Three hours of lectures were given weekly throughout the year, and, in addition to the usual laboratory work, two and a half to four hours of field work were required weekly. For the purpose of preparing the student for immediate intelligent

participation in the autumn excursions, the lectures, after a brief introduction, dealt with the principles and problems of physiographic geology; the forces which form and control the contours of the land, the origin of familiar landscape features; the history of streams; criteria for the determination of their youth, maturity, or old age; possible readjustments of streams which have occurred or which may occur, etc. These subjects were capable of immediate illustration and application on the field excursions. An instance of stream robbery in the vicinity of Bryn Mawr was given to the class for solution, and papers discussing this problem were volunteered. These topics were further illustrated by a set of excellent relief models designed by Professor Davis of the department of Physiographic Geology of Harvard University. The students submitted written reports of the features illustrated by these models. At the same time, i.e., during the autumn and early winter, the materials of the earth's crust were studied in the laboratory and in the field. In addition to the material of the college collections and the specimens gathered by the students, an Educational Series recently procured from the U. S. Geological Survey, consisting of 156 typical specimens of as many well-recognised rock species described by American geologists was open to the study of the students. While this study was going on the class visited the Museum of the Philadelphia Academy of Science, where opportunity was generously given them to handle the unusually fine material collected there. During the winter months the field excursions were replaced by increased laboratory hours and by required reading upon assigned topics. When feasible, the geology of the environment of a student's summer home was assigned to her. Each student reported upon her topic orally. In this way were investigated such subjects as the origin of the present contour of Cape Cod, the past history and the future of Lake Mohonk, the geology of Mt. Desert, roadmaking and road-materials, the history of Niagara Falls and the Whirlpool Gorge, theories as to the origin of loess, continental problems, soils, their nature and origin, a recent volcanic eruption in the United States and its peculiar lava, some famous boulders and their origin, the glaciers of the United States, sandstone dykes, (an anomalous occurrence), etc. The lectures were occupied

during the winter and early spring with lithology; a study of the constitution of the crust of the earth; dynamical geology; an inquiry into the processes which are forming, altering, and disturbing the crust, and with structural geology, an investigation of the mode of arrangement of the formations composing the crust. While the last subject was discussed in the lecture room, models, made from nature, were studied in the laboratory and problems in section drawing and wax interpretation were solved. The treatment of dynamical and structural geology was rendered more effective this year by means of some 280 photographs. These photographs were taken by members of the U. S. Geological Survey and by private geologists throughout the United States. They illustrate the striking geological phenomena of our own country and many of them are unusually fine. By this means every phenomenon described in the lectures could be illustrated by actual examples from the field. The middle and latter part of the spring semester was occupied, both in the laboratory and the lecture room, with historical geology; an inquiry into the sequence of events which the rocks record and into the chronological succession of life. Historical geology takes up the history of the earth where cosmical geology left it, and, following its evolution to the present day, fittingly closes the course.

In the laboratory familiarity was gained with a limited list of type fossils of each geological period. In some of the leading classes of ancient animal life, the students determined unknown genera with the assistance of descriptive keys. Forty-two type-written sheets were prepared for the use of each student in the laboratory. The laboratory work was faithfully performed throughout the year and was tested by frequent quizzes.

Seventeen students took this undergraduate course. After Easter this number was reduced to fifteen by the withdrawal of two members on account of illness. Of these, seven met the former requirement of chemistry. The course, as a minor course, was provisionally open, for the first time, as a free elective to any student. While it is quite essential that the training of a specialist in geology be preceded by something more than an elementary knowledge of the other sciences, in the case of an undergraduate not seeking a specialist's training, such requirements are unnecessary and impracticable. The requirements for a spe-



cialist's course forces geology into the graduate years as is the case in our large universities. Required reading in chemistry and biology can be used advantageously as supplementary work and thus make possible to the undergraduate an insight into the science of geology.

The photographs and models added this year to the equipment of the department were of marked assistance in the work of instruction, and with the expansion of the course rendered the work more satisfactory than heretofore. When the immediate environment of the college has been covered in the field excursions, the question of the time and expense involved in the longer and increasingly instructive excursions becomes a serious one, so serious that under present conditions the instructor is reluctantly forced to abandon a high standard of field work.

An increased library appropriation is the most imperative of the needs of the department. The present appropriation covers merely the subscription to the periodicals and the cost of binding. The list of books needed by the department grows larger each year with no hope of lessening it under present conditions.

The instructor is still engaged in work on the Philadelphia folio, under the U. S. Geological Survey. No publications will be made until the mapping and the structural and petrographical study are completed. In addition to separates from Geologists, gifts have been received from Mr. T. D. Rand, Radnor, Pennsylvania, mineral specimens; from Columbia University, graptolites, typical of the Cambrian, ordovician, and silurian formations; from the Bryn Mawr School, Baltimore, Md. (lent for an indefinite period), Monographs, U. S. G. S., 22 vols.; Mineral Resources, U. S. G. S., 6 vols.; Bulletins, U. S. G. S., 107 vols.; Monograph X, U. S. G. S.; vol. I of the Memoirs of the Peabody Museum.

### *Biology.*

The work of the biological department was conducted by Dr. Thomas Hunt Morgan, Dr. Joseph W. Warren, Dr. Harriet Randolph and some student assistants.

Dr. Morgan lectured on morphology to the graduate students one hour weekly throughout the year. Their work in this sub-

ject was successful. The former Fellow made a study of the position of the young chick with reference to the primitive streak. The Fellow completed her studies on the maturation and fertilization of the egg of *Bufo vulgaris*. The results are now ready for publication and will be offered as a thesis for the doctor's degree. Another student has almost concluded her work on the development of *Alytes*. The Scholar has written, in collaboration with Dr. Morgan, a paper embodying the results of work on the Process of Gastrulation in *Amphioxus*.

The museum is still in a pitiful condition in a small dark room on the fourth floor. There is no temptation under these circumstances to add to the small collection that fills already the inadequate space given to it. Series of animals and plants are needed to illustrate the larger problems of biology, such as the Distribution of Forms, the Process of Evolution, Variation and Adaptation, Sexual Dimorphism, and Embryology.

On account of the costliness and large number of biological journals, nearly all the library fund is expended in purchasing this class of books. More money is greatly needed for the purchase of current text-books, monographs, and general literature.

This year has been exceptional in that no new charts have been added to the small collection. The new courses have suffered especially in consequence.

Last summer the table at Wood's Holl representing Bryn Mawr was occupied by two graduate students and by Dr. Morgan. In addition another graduate student occupied a table subscribed for by herself, and three former students of Bryn Mawr also engaged tables. The opportunities for work offered by the Marine Laboratory at Wood's Holl have been of incalculable benefit to Bryn Mawr College students. The table for this year was assigned to Miss Helen King, Miss Annah P. Hazen, and Miss Ida H. Ogilvie.

To graduate students in physiology a course of lectures was given by Dr. Warren one hour weekly throughout the year on the Problems of Gaseous Metabolism, in which the methods of such investigations were discussed rather fully and the fundamental principles involved were very carefully considered. This course was attended by four students. In the laboratory

two students did the work in physiology. One, who has completed the requirements in physiology for a minor subject for the degree of Doctor of Philosophy, undertook a study of the method of recording the contractions of smooth muscles. After some preliminary work with the muscular coat of the frog's stomach, she began to investigate the heart-beat of anodonta and oysters and succeeded in obtaining useful and interesting curves. This research required much patience in preparing the material and also considerable skill in the management of rather complicated apparatus. The student's readiness in meeting the varying demands of the experiment and her patience and persistency under trying conditions give much promise of success in any line of experimental inquiry to which she may devote herself. Unfortunately it was found to be impracticable to get the material required for this work in such a condition of freshness as to make further research profitable. It was, however, fresh enough to enable the preliminaries of such an investigation to be carried out and this line of research was abandoned after demonstrating the manner in which the heart-beat of such animals may be studied. This method of studying the heart of mollusca has not apparently been made use of by investigators; at least no distinct report of such work has been found. It will now be an easy matter to continue this research whenever really fresh material is readily accessible. The latter part of the year was devoted to an examination of the effect of light of different colors on the regeneration of hydra, and also the influence of differences of temperature on the same process. The results for the different regions of the spectrum were quite negative, but an important and interesting variation in the rate of regeneration is found to be produced by variations in the temperature of the water in which the animal lives. This question ought to be worked out in greater detail, but that would require more material than is accessible in the laboratory at the present time. A preliminary account of these experiments will be published shortly. The Scholar in Biology has devoted much time to several problems connected with muscle contraction and has acquired much skill in the management of apparatus, which has grown steadily in complexity as the work progressed. She first examined

the general question of muscle elasticity along conventional lines and by the ordinary methods. After this her entire time, so far as it was devoted to physiology, was given to obtaining series of muscle curves with a view to studying the effect of fatigue under varying conditions in altering the form of the curve which results from a series of stimulations occurring at regular intervals. This work has been done with unusual care and much facility has been acquired in the management of this class of apparatus and in the conduct of experiments of this nature, which are typical for a great field of research. Dr. Warren has not as yet been able to find time for a detailed examination of the results obtained; a careful collation of the curves has been prepared and a preliminary report on the work made. This investigation required the construction of a considerable amount of apparatus, as it proceeded; indeed this kind of research work would have been practically impossible without a good workshop and a competent mechanic.

In the post-major course in Morphology, conducted by Dr. Morgan, eleven students attended lectures and nine took laboratory courses. Instead of the post-major course in Vertebrate Embryology given in previous years, a course in the Comparative Anatomy of the Mollusca was given in the first semester, and in the second semester a course in Cytology was offered. The latter course was made possible through the addition to the laboratory equipment of five first-class microscopes with immersion lenses. The post-major and graduate courses can be more thoroughly carried out with this new equipment than was possible before.

In the post-major course in physiology Dr. Warren gave lectures as usual on the Structure and Functions of the Central Nervous System. These were attended by seven students in the first semester and by eight in the second, one of these being a graduate student. Three of these students did the laboratory work required for a full five-hour course, and one did enough such work during the second semester to make the course the equivalent of a one-hour lecture course. This latter work calls for no comment, but a word may be said about that of the other three—Miss Ridgway, Miss Strong, and Miss B. G. Wood. Miss Ridgway studied the variations in the action of the curd-

ling ferment under various experimental conditions. This adds to material which is being collected in the laboratory to throw light on the nature of this process. She then made a study of the elasticity of muscle with reference to the effect of post-mortem changes. This work was undertaken chiefly to make Miss Ridgway familiar with the methods of that line of research and with the way in which the details must be tabulated and compared for the construction of curves to show the general results. During the latter weeks of the second semester Miss Ridgway worked with Miss Wood in studying the effect of deglutition on the rate of the heart-beat. They were provided with a modification of the usual ephygmographic apparatus which enabled them to obtain much longer records than are commonly taken. The final results were put together on a large chart as illustrative curves for lecture use. Miss Strong studied the phenomenon of muscular contraction commonly known as the Ritter-Rollett phenomenon, and also examined the effect of pressure on the conductivity of nerves. These problems were found to present somewhat greater instrumental difficulties than had at first been anticipated, and much greater than might have been expected from the recorded observations. To overcome these difficulties many new plans of experimentation had to be devised and much apparatus was constructed and tested. On this account the work of the year, while it ought to be very profitable to Miss Strong in giving her an insight into the ways of the researcher and a knowledge of the dangers besetting his path, has not been as fruitful of results as might have been hoped. Miss Wood's work was largely along chemical lines. She first studied the action of free acid on albuminous substances as an aid to the action of pepsin. After this the influence of formic aldehyde and other substances on the coagulating ferment was examined. The methods for extracting and recognising this ferment were also looked into. Miss Wood then made herself practically familiar with the preparation of glycogen from the fresh liver. After this a series of experiments requiring much care and time was made to determine the elimination of carbonic acid gas by the frog under the influence of various temperatures. During the last weeks of the semester

the time was given to the experiments with the pulse which are reported above. Post-major laboratory work in physiology was done by Miss J. N. Browne in amount sufficient to make the equivalent of a five-hour course in connection with the lectures in morphology. During the first semester Miss Browne was made familiar with the usual methods of examining blood to determine the specific gravity and to estimate the amount of hæmoglobin as shown by the Hæmometer of v. Fleischl. The use of the Thoma-Zeiss apparatus for counting the blood-corpuscles was also studied. During the second semester Miss Browne devoted herself with great faithfulness to a very extended study of the effect of temperature upon the action of very dilute acid on the curdling of milk by commercial ferments. This series of experiments needs to be completed and also to be repeated for detailed verification in certain directions, but it is an exceedingly good piece of post-major work.

\* The instrumental equipment for physiological research and for demonstrative purposes was increased during the year. Two cheap vibrating, so-called "acoustic," interruptors for intervals of one second have been built, and also one of a somewhat novel pattern for a wide range of intervals. A new form of adjustable lens has been made for use in the "artificial eye" to demonstrate the changes in the formation of the image due to accommodation. Mr. Banner has made an automatic shunt for cutting out, opening or closing induction-shocks of the secondary coil as may be needed. He has constructed a number of levers and pulleys of considerable delicacy and fineness as the work of the laboratory required, and these pieces are all planned so as to be useful in a variety of ways as occasion shall arise. An enumeration of these articles or of numerous other smaller appliances can give little idea of the very great helpfulness of the workshop to the laboratory. The new lathe will greatly help, because it will now be possible to undertake the construction of much more complicated and much larger pieces of apparatus. A small lathe of special form will ultimately be needed for some kinds of very delicate work. At present Mr. Banner is busy with the construction of a number of new recording drums of a much lighter pattern than those which

have necessarily been used in most of the work. He is also preparing to make some adjustable stands such as have long been needed for prolonged experiments. The lecture equipment for the instruction given in physiology is very deficient in diagrams illustrative of recent views and progress. There is no money available for this purpose. The needs of the physiological portion of the library should again be emphasised. It is constantly becoming more and more inadequate to the demands made upon it.

The major course in zoology has been remodelled along the old lines. It has been found by experience that it is unprofitable to crowd into the few weeks allotted to this course a complete account of all the lower groups. Last year the mollusca were not studied in the major, but a study of this group was taken up in the post-major course. This year another group has been omitted. Dr. Warren's major course was taken in full by nine undergraduates and also by one graduate student. Another undergraduate student did full work for the second semester and enough in the latter part of the first to finish the work left uncompleted in that semester two years ago. The work of these students was good, that of two or three particularly and exceptionally excellent, and indicative of a brilliant future.

In regard to the work of the minor class Dr. Morgan reports that with the increase in the number of undergraduate students the need of additional assistance in the laboratory has been greatly felt. Each year the post-major class has been larger, and since so much of the time of these students is spent in the laboratory the demand on the professor's time has become very heavy. In consequence the minor class has been left almost wholly to the Demonstrator and assistants. The number of assistants is too small in this class for the best results. Dr. Warren's part of the minor biology was attended by forty-seven students, including one hearer. The work done by this class has been good but not brilliant. There has rarely been a class which has shown such steady and uniform improvement in the laboratory work. The marks for the laboratory have been exceptionally high, and this is due to average excellence rather than to the great merits of a few. The

class in minor biology attended seven lectures by Dr. Randolph, in January, on the structure and mode of reproduction of higher plants; and in February thirteen lectures, with demonstrations on the physiology of plants. The lectures on morphology were followed by work in the laboratory extending through several weeks.

*Report of the Director of Physical Training.*

To the President: Madam,

The work of the department began, as usual, with six weeks of physical examinations, lasting from September 29th to November 12th, 1897. Class-work began on November 15th.

The freshmen and sophomore classes were divided into "weak" and "strong" sections; and two classes were held each week for the seniors, giving identical work but allowing every senior her choice between the afternoon and evening hour.

The usual general elective class was held on Friday afternoons, and grew steadily in numbers throughout the winter, until the spring out-of-door season began.

The mass of class-work done this year has been excellent, if it be remembered that only one half-hour weekly has been given to it, and that even this has been frequently interrupted. If apology is necessary it is merely in regard to the exactness of class drill, for none is needed regarding the health and strength of the students, which are the main objects in view.

The principle adopted is that it is better to reduce the hours of indoor drill to a minimum and to make up the required exercise with healthful out-of-door sports; this regimen is continued throughout the four years' course, a point in which Bryn Mawr differs from every other college. When the time spent on work in the gymnasium has been so much reduced it is useless to spend any of it in marching in figures, wheeling, changing rate of step, and such exercises as merely train the student to time her movement to that of others. These exercises are useful for some purposes, and especially for training the very young or mentally deficient, but in a college gymnasium would seem waste of time that might be used to greater advantage for other purposes. Instead of such exercises, exercises



are selected which have a muscular, nervous or functional value for each student in the class. The work has been so arranged in the belief that during the Bryn Mawr College course no student should be required, or even encouraged, to give time or nervous effort to memorising long sets of exercises, inasmuch as her whole power should be given to the curriculum. Gymnastics as a study should be taken at a professional school ; at college it is only a means of keeping the body in condition for mental work and also, if the student chooses to give extra time for these purposes, of improving her body, under the advice of the director, perfecting the development and removing defects.

After the physical examination the director prepares for each student a card of advice, and its use or neglect is left to the student's choice, the director feeling that she has done all that is required in pointing out to each student the exercises individually advised for her and in strongly recommending their practise.

As the present director leaves her work at Bryn Mawr, she gives a brief review of her four years' work and an outline of the system now in use.

During these four years the office records have been changed from the useless and cumbrous book method to the convenient and scientific card system; a new type of card has been invented for the purpose, whose novelty lies in the collection on the same card of *successive* measurements (twice yearly, for five years) with successive "personal histories" corresponding.

The chart method has been introduced, and differs from that used in other colleges in that the successive physical states, twice yearly, of each student are shown on the same chart for three years; and then in the senior year the records of intermediate steps of improvement are laid aside and the effect of the whole college course is shown on a chart which gives only the entrance measurement and that of the autumn of the senior year, showing both in their relation to the normal standard and to each other. From this the final advice is given to each student, and when she graduates she receives a duplicate chart showing her first and last measurements in the college. The giving of duplicates was begun this year in reply to many requests, even by letter, from former graduates.

Graded classes have been introduced also, beginning with the four college grades only, but now including sub-divisions of both freshmen and sophomore classes. The effect has been that, knowing the classes' training and ability, the upper classes have been given harder work each year, until the present seniors have been doing with ease class-work which few teachers would dare to give to a whole class of young women not in daily training.

The point aimed at throughout has been the raising of the mass through work on all the individuals, not the training of some individuals for special feats, which leaves other individuals unimproved. The latter is the threatening danger of all college athletics, and one which women should be careful to avoid. This danger has beset basket-ball, but every effort is being made to arouse and encourage a spirit of play for its own sake, and not for the sake of making the class team. The students are encouraged to form scrub teams for amusement, to play against each other and not against the class teams. A successful effort has been made during the past four years to bring basket-ball under proper rules of safety and no student is now allowed to play except with the approval of the director. This is the only respect in which the department controls the basket-ball games, as it is felt that the students should manage their own athletics; and even this is arranged through the coöperation of the Athletic Association, each captain being required to submit her list of players for approval. This rule has been proved absolutely necessary by a number of cases in which some of the most enthusiastic and skillful candidates have been found unfit to play by reason of heart troubles. That some of these girls had played in preparatory schools shows either negligence on the part of the school supervision, or else that basket-ball is an extra strain on the heart and may have produced the trouble or developed a latent one. The director has been watching the game with anxiety for four years, and is sorry to say that the evidence at present, although not yet sufficient to be considered at all conclusive, seems to tend to this belief. Students prevented from playing on account of heart trouble have markedly improved. Students

with a slight affection of the heart who have been allowed to play have shown an increase in the trouble. Students whose hearts were in perfect order, as far as examination showed, have played and developed murmurs; while most of the students who have been troubled with "nervous hearts" have been good basket-ball players of several years' standing. These cases in each class are so few as to be inconclusive; and in almost all cases other causes may be readily assigned. It is the coincidence only that is alarming; the question is worth further investigation.

The time, it would seem, has now come when the force of guiding influence must be exerted a little on the side of restraint for young women's athletics, rather than of increased incentive. For twenty years girls have been urged and persuaded to exercise, but now athletics have become the fashion and persuasion must sometimes be used on the other side. Many girls still need more impelling, but many are carried by the wave of popular enthusiasm past their own strength and secret wish, and others who feel perfect ability and enjoyment have yet harmed themselves physically by excess. Both this and the caution against neglecting the many in the special training of the few apply to the maintaining of college records in track athletics. Slight contests, in the students' hands, are harmless and entertaining, but too much stress should not be laid on them, and it seems to me better that the department should not officially promote them.

Such a record day was held Thursday, February 24th, by the Athletic Association, with the approval of the department, and much interest was shown.

Class-work closed, without a public drill, on the usual date—the Thursday preceding the spring vacation (March 31st, 1898).

Spring measurements were begun the same day and finished on Friday, April 23rd.

The measurements taken in October and November were as follows :

#### First Measurements.

Freshmen . . . . .	80
Non-residents . . . . .	2
Hearers . . . . .	2
Sophomores . . . . .	2

Graduates . . . . .	10
Fellows . . . . .	2
	<hr/>
Total . . . . .	98

## Second Measurements.

Sophomores . . . . .	57
Juniors . . . . .	43
Seniors . . . . .	47
Graduates . . . . .	2
	<hr/>
Total . . . . .	149

Total in first semester, 247.

The measurements taken in February and April were as follows:

In February:

First measurements . . . . .	5
Second measurements . . . . .	1
	<hr/>
Total . . . . .	6

In April:

Second measurements . . . . .	225
	<hr/>
Total in second semester . . . . .	231

Total in both semesters:

First measurements . . . . .	103
Second measurements . . . . .	375
	<hr/>

Total measurements, 1897-98 . . . . . 478

The measurements taken during the past four years have been:

	First Measurements.	Second Measurements.	Total.
1894-95 . . . . .	83	319	402
1895-96 . . . . .	88	348	436
1896-97 . . . . .	83	344	427
1897-98 . . . . .	103	375	478
	<hr/>	<hr/>	<hr/>
Total . . . . .	357	1386	1743

The fire brigades were organised again on the plan of including almost all the undergraduates of a hall, and assigning the work to be done in the order of arrival at the meeting place after the sounding of the alarm; that is, each taking her own number on arriving, and being expected to know the duties of that number. An innovation was made this year in paying the captains, and then holding them responsible for weekly practise drills. The most efficient indoor captain was made captain also of the men's squad, or outdoor brigade.

A change was also made in the management of the swimming pool. It had been found impracticable to lower the water for the beginners, as it required too much time to refill the pool; so the shallower end was divided off for them by a wire net, and two days each week reserved for their use. On those days, at fixed hours, volunteer student teachers were in attendance. Candidates were authorised as swimmers (being told also whether they might, or might not, teach others) when they proved themselves able to swim twice the entire length of the pool, without stopping or touching anything, in the presence of the director and a member of the athletic board. An hour each week was appointed for this test.

The system of registering out-of-door work has been continually improved, although no one who has not attempted it can imagine the difficulty of giving the just value to every kind and quantity of exercise indoors and out, and translating the result into the college system of grades.

The range and variety of the exercises taken has been constantly increased, and whereas four years ago there were not a dozen bicycles in the college, there are now over one hundred. This year an effort was made, with some success, to rouse an interest in golf. Mr. Harrison, the champion long distance driver of the United States, gave a well-attended talk on the game in the gymnasium, at the invitation of the director.

In closing my four years' work for Bryn Mawr College it is with both pride and thankfulness that I speak of our freedom, during that time, from serious accidents; I might almost say from any accidents, for we have had none in our regular work. Only gymnasium teachers know how many accidents would occur

but for constant watchfulness, and how many may occur in spite of the greatest care.

Respectfully submitted,

ALICE BERTHA FOSTER, M. D.

*Report of the Librarian.*

To the President: Madam,

One thousand six hundred and sixty-three volumes have been added to the library during the year, making the total number of the collection twenty-eight thousand three hundred and ninety-five. From this number must be deducted, however, that of the books withdrawn from the library as worn out, duplicates or lost; this can be given definitely next year. Of the books added to the library in 1897-98, one thousand one hundred and five were purchased from the regular appropriations; five hundred and fifty-eight were gifts.

The distribution of the gifts of money for the year was as follows:

From Miss Garrett's gift the department of English received \$107.50; that of Physics, \$75; that of Reference, \$68.13; that of Modern German, \$50; that of Latin literature, \$20; that of Greek literature, \$10; and that of Biology, \$5.

From the James E. Rhoads memorial fund, the department of Semitic literature received \$60.05.

From Mr. J. G. Rosengarten the French department received \$33 for a subscription to the "Revue des deux mondes" for two years, and for the books of M. Ferdinand Brunetière.

From the fund of \$61.50 collected by the students of English, duplicate books for the use of the department were bought.

In addition to the gifts of money, there have been the following gifts of books and periodicals, which we hereby gratefully acknowledge:

Mr. Howard Comfort: Account of the conviction of Margaret Lucas; Account of the life of John Richardson; Barclay, Apology, 1755; Apology, 1789; Apology, 1850; Letters and Papers, 1847; Besse, Confutation of the charge of deism; Bevan, Life of Paul; Bristed, Society of Friends; Buxton, Memoirs of

Sir T. F. Buxton; Caine, Recollections of D. G. Rossetti; Colwell, Position of Christianity in the United States; Crosfield, Memoirs of Samuel Fothergill; Faldo, Quakerism in Christianity; Fisher, Testimony of truth exalted; Gurney, Observations; Hallam, Remains in prose and verse; Holme, Collection of epistles and works; Hughes, Memoirs of a brother; Hume, Exhortation to the inhabitants of South Carolina; Kendall, Memoirs of John Kendall, 1815; Leadbeater, Leadbeater's papers, 2 v.; Macleod, Memoir of Norman Macleod; Marshall, Passages from diary; Matthews, The recorder, 2 v.; Moore, Life of Sheridan, 2 v.; Paget, New 'Examen'; Penn, No cross, no crown, 1807; Primitive Christianity revived; Pennington, Brief extracts; Short and easie method with the deists; Scott's Works, 2 v.; Shewen, True Christian's faith and experience; Smiley, Who is he?; Some account of the life of S. Neale; Stanton, Journal; Sutcliffe, Travels in North America; Travels in North America, ed. 2; Tallock, Friendly sketches in America; Taylor, Truth's innocency; Waddington, Arthur Hugh Clough; Watson, Historic tales of olden time, 1833; Whitehead, Account of Richard Davies; Wordsworth, Memoirs of, 2 v.

Association of Collegiate Alumnae: Bibliography of the higher education of women.

Mr. T. W. Balch: Balch, Letters and papers; French in America, v. 1.

Boston C. A. S.: Statement, 1897.

Miss E. L. G. Britton: Pamphlet.

Baroness Burdett-Coutts: Burdett-Coutts, ed. Woman's mission.

Chicago University. Theses: Asada, Hebrew text of Zechariah 1-8; Bain, Relations of the Wisconsin and Kansan drift-sheets; Baldwin, Scutage and knight service in England; Bernhard, Ueber die einföhrung von acylen in den benzoylessigaether; Berry, Letters of the Rm. 2 collection; Buckley, Phallicism in Japan; Carpenter, Metaphor and Simile in the minor Elizabethan drama; Case, On the osteology of protasega; Chamberlain, Contribution to the life history of Salix; Clark, Public schools of Chicago; Cumming, Poor laws of Massachusetts and New York; Dickson, Analytic representations of substitutions on a power of a prime number of letters; Eycleshymer, Early development of Ambly-

toma; Fertig, Secession and reconstruction of Tennessee; Folin, On urethanes; Fowler, Negatives of the Indo-European languages; France, Emperor Julian's relation to the new sophistic and neo-Platonism; Garner, Condensations with benzoin; Germanic Studies, No. 2; Gordon, Cyanite-gneiss; Heidel, Pseudo-Platonica; Hesse, On malonic nitrile; Hull, On the use of the interferometer; Hutchison, On the reduction of hyperelliptic functions; Jones, On nitro-paraffin salts; Keunmal, Lake Passaic; Lewis, History of the English paragraph; Lillie, Embryology of the Unionidae; Linscott, Latin third declension; Locy, Contributions to the structure of the vertebrate head; MacLellan, The impersonal judgment; Mead, Early development of marine annalids; Miller, Preliminary study of the pueblos of Taos, New Mexico; Perrin, History of Compulsory education in New England; Poyen-Bellisle, Les sons et les formes du Créole dans les Antilles; Pratt, Use of color in the verse of the English romantic poets; Reynolds, Treatment of nature in English poetry between Pope and Wordsworth; Sanders, Relation of certain economic principles to social readjustment; Searles, Lexicographical study of Greek inscriptions; Smith, On the addition products of the aromatic isocyanides; Stone, On the electrical resistance of thin films; Swartz, Action of sodium ethylate on amide bromides; Thomas, On a difference in the metabolism of the sexes; Thompson, Development of the French monarchy under Louis VI; Triggs, ed. Assembly of gods by John Lydgate; Tunell, Transportation on the great lakes of North America; Vincent, Social mind and education; Votaw, Use of the infinitive in biblical Greek; Walker, Semitic negative; Wyckoff, Feudal relations between the kings of England and Scotland.

Cornell University: Koch, Catalogue of the Dante collection.

Miss E. T. Daly: Smith, Our music.

Mr. C. M. Depew: Depew, Four days at the National Republican convention, 1896.

Dr. W. C. France: France, Emperor Julian's relation to the new sophistic and neo-Platonism.

Mr. A. H. Garlick: Garlick, New manual of method.

Girard College: Girard College—its semi-centennial 1848-98.

Mr. K. G. Guthrie: Three pamphlets.

Mr. Julius Huckle: Huckle, Die geld verrichtungen.



Professor Gonzalez Lodge: Krause, De quom conjunctionis usu; Nimmercranz, Plantus de vita moribusque præceptor exposuit; Schroeber, Uber die atellanischen schauspiele der Römer.

Mr. C. C. Lord: Lord, Poems of Pennacook.

Miss Isabel Ely Lord: Blackwood's Edinburgh magazine, v. 98; Chalmers, On political economy, 1832; Life of Sir Robert Peele, 2 v.

Mr. S. I. Lowrie: Lowrie, Explanation of Hebrews.

The Macmillan Co.: Graduate courses, 1897-98.

Mr. H. W. Magown: Magown, Early religion of the Hebrews.

Maryland. Geological survey. Report, v. 1.

Michigan. Board of Health. Report, 1895-96, and Supplement; Proceedings of sanitary convention, 1897.

Mr. Lloyd Mifflin: Mifflin, At the gates of song.

Missouri: Missouri botanical garden. Report, v. 1—8.

Munn & Co.: Classified index of articles in Scientific American.

New York (City): Education, Department of. Report on the free lectures to the people.

New York (State): Historian. Report, 1896. Library. Extension Bulletin 24; Extension Syllabus 1, 25, 41, 43, 44, 59; Legislation, 1-9; Report, 1893-96; Museum, Bulletin, v. 4, Nos. 16-18; Report, v. 50, pt. 1.

Mrs. C. F. Palmer: Palmer, Inebriety, its source, prevention and cure.

Philadelphia Commercial Museums: American trade with India.

Mr. G. M. Philips: Historic letters.

Mr. G. B. Rea: Rea, Facts and fakes about Cuba.

St. Louis, Public Library, Classified list of English prose fiction, no. 1.

Smithsonian Institute: History of Smithsonian institute, 1846-96.

Professor H. W. Smyth: Upsala Universitets, Arskrit, 1893-96, 3 v.; Revue des revues, 2 v.; 12 Dissertations.

Mr. H. H. Swain: Swain, Economic aspects of railroad receiverships.

President Thomas: Painter, Introduction to English litera-

ture; Meredith, Tragic comedians; Sherman, Analysis of English literature.

Toronto University: Studies, Ser. 2, v. 1; Econ., Ser., no. 1.

United States Government: Revised statutes relating to District of Columbia; Statutes at large, 1873-75; American Republics, Bureau of. Commercial nomenclature, 2 v.; Agriculture, Department of. Publications; Census, Eleventh. Population of United States, pt. 2, Report on statistics of wages, 1888; Civil service commission. Report 14; Education, Bureau of. Report 1895-96, v. 2; Report 1896-97, v. 1; Geological survey. Mineral resources. Powell. Sands of the arid region; Interior, Department of. Official register, 1871, 1877, 1879, 2 v.; 1881, 2 v.; 1883, 2 v.; 1885, 2 v.; 1887, 2 v.; 1889, 2 v.; 1891, 2 v.; 1893, 2 v.; Museum. Report, 1895; Ordnance, Chief of. Report, 1878-83, 1887, 1890-93, index 1867-87; Treasury, Department of. Finance Report, 1874-75, 1873-83, 1885, v. 1; 1888-89, Report on collection of duties, 1885-86.

University Club of Baltimore: *Revue des deux mondes*, 1887-97, 60 volumes.

Professor E. B. Wilson: Wilson, Experiments on the early development of the amphibian embryo.

Mr. R. C. Winthrop, Jr.: *Memoir of R. C. Winthrop*.

Wisconsin University: Quantz, Problems in the psychology of reading.

Woman's medical college, Philadelphia: Marshall, History of the Woman's medical college.

The list of periodicals given is as follows, the gift being from the publisher unless otherwise stated :

Advocate of peace; American economist; Bibliographical contributions of Harvard University; Book buyer; Book news; Book reviews; Bookman; Boston evening transcript; Bulletin of bibliography; Bulletin of the University of Wisconsin; Christian endeavor journal; Deaconess' advocate; Friends' missionary advocate; *Hochschul nachrichten*; Lantern; Literary era; Literary news; Literary world; Money; Oberlin College bulletins; Philadelphia public ledger; Public ownership review; *Revue des deux mondes* (gift of Mr. J. G. Rosengarten); Sound currency; Southern workman; Sunday school times; Temple; University of Chi-

cago record; Washington book chronicle; Wilson bulletin; Woman's journal.

Our thanks are again due to the libraries that have so courteously lent us books throughout the year and to the members of our faculty who have so generously placed their books at the disposal of the students.

During the year the revision of the catalogue was begun, the number of cards put in the catalogue being nine thousand three hundred and forty-six.

It seems almost superfluous to speak once more of the need for a library building. The inconvenience to the students becomes greater each year; the wear and tear of the books by the crowding on the shelves, and by the constant moving necessary under present conditions, add much to the expenses of the library; the only arrangements possible for the technical work of the librarians are so hampering that the amount of work done is materially lessened. There is practically no way in which provision can be made for the books of next year except that adopted in the old Library of Congress of stacking them on the floor.

The need of an increased appropriation for books is keenly felt. Through the courtesy of sister colleges the library is supplied with much of the necessary material for its work, but when such loans are made impossible by the needs of the lending libraries, the work of a department here is sometimes stopped temporarily. A special want in this direction is that of a fund for completing the periodicals that were included in the Sauppe collection. Many of them are of great value, and the usefulness of the library would be largely increased by the purchase of the later volumes. A fund for binding for the Sauppe collection is also much needed. Valuable editions are in danger of mutilation from lack of protection.

Respectfully submitted,

ISABEL ELY LORD,

Acting Librarian.

## XI.

*Resolutions passed by the Bryn Mawr College Faculty, the Alumnæ Association and the Graduate Club, on the occasion of the death of Dr. James Carey Thomas.*

At a meeting of the Faculty of Bryn Mawr College, held this day (November 11th, 1897), it was voted to spread the following resolution upon the minutes and to send a copy of it to the President and to the Board of Trustees:

“The Faculty of Bryn Mawr College desires to give expression to its deep sorrow at the death of James Carey Thomas, and, as a tribute to his memory, to put on record its grateful recognition of the services rendered by him to this institution.

“His wise and judicious counsel, born of wide sympathies and large experience, assisted in the foundation of this college; from its foundation to the present time, as a trustee, he has offered many and signal proofs of his unremitting zeal in behalf of its well-being and development, and he has aided us by his hearty and kindly words of sympathetic interest.”

At a meeting of the Alumnæ Association of Bryn Mawr College, held at Bryn Mawr, November the 20th, 1897, the following resolution was adopted:

“The Alumnæ of Bryn Mawr College have heard with deep regret of the death of Dr. James Carey Thomas. They desire to record their appreciation of the wise judgment, the broad and liberal views, and the ready sympathy which, as a member of the Board of Trustees, he has shown in his work for the college since its earliest days, and they desire to express to President Thomas their sympathy in her personal loss.”

At a meeting of the Graduate Club, held November 10th, 1897, the following resolution was passed:

“Resolved, That the members of the Graduate Club, of Bryn Mawr College, desire to express their sincere sorrow for the death of Dr. James Carey Thomas, a trustee of the college from its foundation, and its devoted friend. They desire, also, to offer their profound sympathy in this bereavement to the president of the college and to the other members of Dr. Thomas's family.”

ANNUAL REPORT

OF

THE PRESIDENT

OF

BRYN MAWR COLLEGE

1898-99.

---

PHILADELPHIA :

THE JOHN C. WINSTON CO., 1006-1016 ARCH STREET.

## BOARD OF TRUSTEES.

PHILIP C. GARRETT,  
*President.*

HENRY TATNALL,  
*Treasurer.*

EDWARD BETTLE, JR.,  
*Secretary.*

JOHN B. GARRETT, Rosemont, Pa.	HOWARD COMFORT, Philadelphia.
CHARLES HARTSHORNE, Philadelphia.	JUSTUS C. STRAWBRIDGE, Philadelphia.
DAVID SCULL, Philadelphia.	THOMAS SCATTERGOOD, Philadelphia.
ALBERT K. SMILEY, Lake Mohonk, N. Y.	HENRY TATNALL, Philadelphia.
PHILIP C. GARRETT, Philadelphia.	JAMES WOOD, Mt. Kisco, New York.
EDWARD BETTLE JR, Philadelphia.	ALEXANDER C. WOOD, Cinnaminson, N.J.
RUFUS M. JONES, Haverford, Pa.	

## EXECUTIVE COMMITTEE.

HOWARD COMFORT,	EDWARD BETTLE, JR.,
CHARLES HARTSHORNE,	ALEXANDER C. WOOD,
RUFUS M. JONES.	

## COMMITTEE ON BUILDINGS AND GROUNDS.

DAVID SCULL,	THOMAS SCATTERGOOD,
JUSTUS C. STRAWBRIDGE,	HENRY TATNALL,
ALBERT K. SMILEY.	

## FINANCE COMMITTEE.

THOMAS SCATTERGOOD,	CHARLES HARTSHORNE,
JUSTUS C. STRAWBRIDGE.	

## LIBRARY COMMITTEE.

EDWARD BETTLE, JR.,	HOWARD COMFORT,
ALEXANDER C. WOOD.	

## RELIGIOUS LIFE COMMITTEE.

DAVID SCULL,	JOHN B. GARRETT,
JAMES WOOD.	

## ACADEMIC APPOINTMENTS.

**M. CAREY THOMAS, Ph.D., LL.D.,** *President of the College and Professor of English.*

A.B., Cornell University, 1877; studied at the Johns Hopkins University, 1877-78; University of Leipsic, 1879-82; Ph.D., University of Zürich, 1882; Sorbonne and Collège de France, 1883; Dean of the Faculty of Bryn Mawr College and Professor of English, 1885-94.

**CHARLOTTE ANGAS SCOTT, D.Sc.,** *Professor of Mathematics.*

Lincoln, England. Graduate in Honours, Girton College, University of Cambridge, England, 1880; B.Sc., University of London, 1882; Lecturer on Mathematics in Girton College, 1880-84; lectured in connection with Newnham College, University of Cambridge, England, 1880-83; D.Sc., University of London, 1885.

**HERMANN COLLITZ, Ph.D.,** *Professor of Comparative Philology and German.*

Bleekede, Hanover, Germany. University of Göttingen, 1875-78; University of Berlin, 1878-81; Ph.D., University of Göttingen, 1878; Privatdocent in the University of Halle, 1885-86.

**JAMES HARKNESS, A.M.,** *Professor of Mathematics.*

Derby, England. Major Scholar, Trinity College, University of Cambridge, England, 1882; Graduate in Honours (8th Wrangler) in the Cambridge Mathematical Tripos, 1885; Mathematical Exhibitioner, London University Intermediate Arts Examination, 1885; Mathematical Scholar, London University B.A. Examination, 1887.

**HERBERT WEIR SMYTH,\* Ph.D.,** *Professor of Greek.*

A.B., Swarthmore College, 1876, and Harvard University, 1878; University of Leipsic, 1879-81; University of Göttingen, 1881-83; Instructor in Classics and Sanskrit, Williams College, 1883-85; Ph.D., University of Göttingen, 1884; Fellow by Courtesy and Lecturer on Greek, Johns Hopkins University, 1885-87; Reader in Greek Literature, Johns Hopkins University, 1887-88.

**MARY GWINN, Ph.D.,** *Professor of English.*

Studied at the University of Leipsic, 1879-82; University of Zürich, 1882; Sorbonne and Collège de France, 1883; Fellow in English, Bryn Mawr College, 1885-87, and Graduate Student, 1887-88; Ph.D., Bryn Mawr College, 1888.

**CHARLES McLEAN ANDREWS, Ph.D.,** *Professor of History.*

A.B., Trinity College, 1884; Fellow in Johns Hopkins University, 1888-89; Ph.D., Johns Hopkins University, 1889.

**GONZALEZ LODGE, Ph.D.,** *Professor of Latin.*

A.B., Johns Hopkins University, 1883; Graduate Scholar and Fellow, Johns Hopkins University, 1883-86; Ph.D., Johns Hopkins University, 1886; Professor of Greek, Davidson College, 1886-88; American School of Classical Studies, Athens, 1888-89; University of Bonn, 1889.

**GEORGE A. BARTON, Ph.D.,** *Associate Professor of Biblical Literature and Semitic Languages.*

A.B., Haverford College, 1882, and A.M., 1885; studied under the direction of the American Institute of Hebrew, 1885-86; Harvard University, 1888-91; Thayer Scholar, Harvard University, 1889-91; A.M., Harvard University, 1890; Ph.D., Harvard University, 1891.

**JOSEPH AUGUSTE FONTAINE,† Ph.D.,** *Professor of Romance Languages.*

College of Sion, Nancy, France, 1879; Johns Hopkins University, 1882-86; Ph.D., Johns Hopkins University, 1886; Collège de France, Sorbonne, Ecole des Hautes Etudes, Ecole des Chartes, University of Bonn, 1886-87; Instructor, University of Nebraska, 1887-89; Professor of Modern Languages, University of Mississippi 1889-91.

---

\* Granted leave of absence for the year 1899-1900. In 1899-1900, the courses usually given by Dr. Smyth will be given by Dr. Hamilton.

† Granted leave of absence for the year 1899-1900. In 1899-1900, the courses usually given by Dr. Fontaine will be given by Dr. Schinz.

ARTHUR STANLEY MACKENZIE, PH.D., *Professor of Physics.*

A.B., Dalhousie University, 1885; Tutor in Mathematics, Dalhousie University, 1887-89; Graduate Scholar, Johns Hopkins University, 1889-90; Fellow in Physics, Johns Hopkins University, 1890-91; Ph.D., Johns Hopkins University, 1894.

JAMES DOUGLAS BRUCE, PH.D., *Associate Professor of English Philology.*

A.M., University of Virginia, 1883; University of Berlin, 1886-88; University of Strassburg, 1888; Johns Hopkins University, 1889-90; Professor of Modern Languages, Centre College, 1890-91; Ph.D., Johns Hopkins University, 1894.

THOMAS HUNT MORGAN, PH.D., *Professor of Biology.*

B.S., State College, Kentucky, 1886, and M.S., 1888; Graduate Scholar, Johns Hopkins University, 1888-89; Fellow in Biology, Johns Hopkins University, 1889-90; Ph.D., Johns Hopkins University, 1890; Adam T. Bruce Fellow, Johns Hopkins University, 1890-91.

JOSEPH W. WARREN, M.D., *Associate Professor of Physiology.*

A.B., Harvard College, 1871; University of Berlin, 1871-72; University of Leipsic, 1872-73; University of Bonn, 1873-79; M.D., University of Bonn, 1880; Assistant and Instructor in Physiology, Harvard Medical School, 1881-91; Lecturer in Medical Department of the University of the City of New York, 1885-86; Lecturer in Physiology, University of Michigan, 1889.

ELMER P. KOHLER, PH.D., *Associate Professor of Chemistry.*

A.B., Muhlenberg College, 1886, and A.M., 1889; Johns Hopkins University, 1889-91; Fellow in Chemistry, Johns Hopkins University, 1891-92; Ph.D., Johns Hopkins University, 1892.

LINDLEY MILLER KEASBEY, PH.D., R.P.D., *Associate Professor of Political Science.*

A.B., Harvard University, 1888; A.M., Columbia College, 1889; Ph.D., Columbia College, 1890; University of Berlin, 1890-91; University of Strassburg, 1891-92; *Rerum Politicarum Doctor*, University of Strassburg, 1892; Assistant in Economics, Columbia College, and Lecturer on Political Science, Barnard College, 1892; Professor of History, Economics, and Political Science, State University of Colorado, 1892-94.

LOUIS EMIL MENDER, PH.D., *Associate Professor of Romance Philology.*

A.B., Mississippi College, 1888, and A.M., 1890; Professor of Latin and German, Mary Le Grand Institute, Vicksburg, Miss., 1888-90; Fellow in Romance Languages, Johns Hopkins University, 1892-93; Ph.D., Johns Hopkins University, 1893; Instructor in Romance Languages, Johns Hopkins University, 1893-94; Associate in Romance Languages Johns Hopkins University, 1894-97.

FONGER DEHAAN, PH.D., *Associate in Spanish.*

Leeuwarden, Holland. Ph.D., Johns Hopkins University, 1895; Instructor in Modern Languages, Lehigh University, 1885-91; Fellow in Romance Languages, Johns Hopkins University, 1893-94; Assistant in Romance Languages, Johns Hopkins University, 1893-95; Instructor in Romance Languages, Johns Hopkins University, 1895-96; Associate in Romance Languages, Johns Hopkins University, 1896-97.

JAMES H. LEUBA, PH.D., *Associate in Psychology and Pedagogy.*

B.S., Neuchâtel, Switzerland, 1886; Ph.B., Ursinus College, 1888; Scholar in Psychology, Clark University, 1892-93; Fellow in Psychology, Clark University, 1893-95; Ph.D., Clark University, 1896.

FLORENCE BASCOM, PH.D., *Associate in Geology.*

A.B., University of Wisconsin, 1882, B.Sc., 1884, and A.M., 1887; Johns Hopkins University, 1891-93; Ph.D., Johns Hopkins University, 1893; Assistant in Geology and Instructor in Petrography, Ohio State University, 1893-95.

CHARLES MONTAGUE BAKEWELL, PH.D., *Associate Professor of Philosophy.*

A.B., University of California, 1889, and A.M., 1891; Thayer Scholar, Harvard University, 1891-92; A.M., Harvard University, 1892, and Ph.D., 1894; Walker Fellow of Harvard University, Universities of Berlin and Strassburg, 1894-95; John Harvard Fellow of Harvard University, University of Paris, 1895-96; Instructor in Philosophy, Harvard University, 1896-97; Instructor in Philosophy, University of California, 1897-98.



**WILLIAM ALLAN NEILSON, PH.D.,** *Associate in English Literature.*

Doune, Scotland. Holder of MacDougall Bursary, University of Edinburgh, 1887-90, and A.M., 1891; Dickson Travelling Fellow, University of Edinburgh, 1891; English Master, Upper Canada College, Toronto, Ont., 1891-95; A.M., Harvard University, 1896; University Scholar, Harvard University, 1896-97; Morgan Fellow, Harvard University, 1897-98; Ph.D., Harvard University, 1898.

**ALBERT HAAS, PH.D.,** *Associate in German Literature.*

Herzberg, Schweinitz, Prussia. University of Berlin, 1891-92, and 1893-95. University of Geneva, 1892; Ph.D., University of Berlin, 1895; Sorbonne and University of Bonn, 1896; University of Freiburg, 1897.

**WILMER CAVE FRANCE, PH.D.,** *Associate in Classical Literature.*

Tysley, Worcestershire, England. Mason College, Birmingham, England, 1885-87; Girton College, University of Cambridge, England, 1888-92; Classical Tripos, 1892; Fellow in Greek, Bryn Mawr College, 1892-93; Fellow in Latin, University of Chicago, 1893-94, and Fellow in Greek, 1894-95; Ph.D., University of Chicago, 1895; Reader in Greek and Latin, University of Chicago, 1895-96.

**JOSEPH CLARK HOPPIN, PH.D.,** *Associate in Classical Art and Archaeology.*

A.B., Harvard University, 1893; American School at Athens, Winter Semester, University of Berlin, Summer Semester, 1893-94; University of Munich, 1894-95; American School at Athens, Winter Semester, University of Munich, Summer Semester, 1895-96; Ph.D., University of Munich, 1896; American School at Athens, 1896-97; Lecturer on Greek Vases, American School at Athens, 1897-98; Instructor in Greek Art, Wellesley College, 1898-99.

**ROBERT SOMERVILLE RADFORD, PH.D.,** *Associate in Latin Literature.*

Ph.B., University of Virginia, 1889, and A.M., 1892; Instructor in Latin and Greek, University of Virginia, 1888-92; Graduate Scholar, Johns Hopkins University, 1893-95; Ph.D., Johns Hopkins University, 1895; Instructor in Latin, Academy of Northwestern University, 1895-96; Instructor (in charge of Department) in the Latin Language and Literature, Washburn College, 1897-99.

**ALLERTON S. CUSHMAN, PH.D.,** *Associate in Chemistry.*

S.B., Worcester Polytechnic Institute, 1888; studied at Heidelberg, 1889-90; Instructor in Chemistry, Washington University, 1892-96; Harvard University, 1896-97; John Harvard Fellow, Harvard University, 1897-98; A.M., Harvard University, 1897, and Ph.D., 1898.

**ALBERT P. WILLS, PH.D.,** *Associate in Applied Mathematics and Physics.*

B.E.E., Tufts College, 1894; studied at Clark University, 1894-97; Ph.D., Clark University, 1897; Universities of Berlin and Göttingen, 1898-99.

**HOLLISTER ADELBERT HAMILTON, PH.D.,** *Lecturer in Greek.*

A.B., University of Rochester, 1892; University of Chicago, 1894; Instructor in Greek and Latin, University of Rochester, 1894-96; Graduate Scholar, Johns Hopkins University, 1897-98; Fellow in Greek, Johns Hopkins University, 1898-99; Ph.D., Johns Hopkins University, 1899.

**ALBERT SCHINZ, PH.D.,** *Lecturer in French.*

Neuchâtel, Switzerland. A.B., University of Neuchâtel, 1888, and A.M., 1889. Licentiate in Theology, 1892; Student, University of Berlin, 1892-93; University of Tübingen, 1893; Ph.D., University of Tübingen, 1894; Sorbonne and Collège de France, 1894; Privatdozent, University of Neuchâtel, 1896-97; Instructor in French, Clark University, 1897-98; Instructor in French, University of Minnesota, 1898-99.

**CLARENCE D. ASHLEY, LL.M., LL.D.,** *Non-Resident Lecturer in Law.*

A.B., Yale University, 1873; University of Berlin, 1876-78; LL.B., Columbia University, 1880; Professor of Law, Metropolis Law School, 1891-95; Professor of Law, New York University, 1895-1900; Vice-Dean of the Faculty of Law in charge of the Evening Division of the Law Department of New York University, 1895-96; Dean of the Faculty of Law, New York University, 1896-1900.

**ROSE CHAMBERLIN,** *Reader in German and French.*

Great Yarmouth, England. Graduate in Honours, Newnham College, University of Cambridge, England, 1886 (Medieval and Modern Languages Tripos, First Class).

**HARRIET RANDOLPH, PH.D.,** *Demonstrator in Biology and Reader in Botany.*

A.B., Bryn Mawr College, 1889; Fellow in Biology, Bryn Mawr College, 1889-90; University of Zürich, 1890-92; Ph.D., University of Zürich, 1892.

LUCY MARTIN DONNELLY, A.B., *Reader in English.*

A.B., Bryn Mawr College, 1893; University of Oxford, England, and University of Leipsic, 1893-94; Sorbonne and Collège de France and University of Leipsic, 1894-95.

HELEN WHITALL THOMAS, A.B.,\* *Reader in English.*

A.B., Bryn Mawr College, 1893; University of Leipsic, Second Semester, 1893-94; Sorbonne and Collège de France and University of Leipsic, 1894-95; Bryn Mawr College, 1895-96.

HELEN STRONG HOYT, A.M., *Reader in English.*

A.B., Bryn Mawr College, 1897, and A.M., 1898; Bryn Mawr College, 1897-98.

EDITH PETTIT, A.M., *Reader in English.*

A.B., Bryn Mawr College, 1895, and A.M., 1898; Sorbonne and Collège de France, 1896-97; Bryn Mawr College, 1897-98.

MARY DELIA HOPKINS, A.M., *Reader in English.*

A.B. and A.M., Bryn Mawr College, 1896; Fellow in English, Bryn Mawr College, 1896-97, and Reader in English, 1897-98.

AGNES FRANCES PERKINS, A.M., *Reader in English.*

A.B., Bryn Mawr College, 1898, and A.M., 1899; Bryn Mawr College, 1898-99.

FRANCES LOWATER, *Demonstrator in Physics.*

Nottingham, England. University College, Nottingham, 1888-91, 1892-93; Newnham College, University of Cambridge, England, 1891-92. Fellow in Physics, Bryn Mawr College, 1896-97, and Graduate Scholar in Physics, 1897-98; Secretary of Bryn Mawr College, 1898-99.

GERTRUDE LANGDEN HERITAGE, A.M., *Demonstrator in Chemistry.*

Bryn Mawr, Pa. A.B., Bryn Mawr College, 1896, and A.M., 1899. Graduate Student in Chemistry, Bryn Mawr College, 1896-97, 1898-1900, and Graduate Student in Mathematics and Chemistry, 1897-98.

LOUISA SMITH, M.D., *Director of the Gymnasium.*

Graduate of the Anderson Normal School of Gymnastics, 1895; Special Course in Medical Gymnastics, Anderson Normal School of Gymnastics, 1895; Assistant Teacher in the Summer School of Physical Education, Cornell University, 1895; M.D., Syracuse University, 1898; Assistant Teacher in Chautauqua School of Physical Education, 1898.

JANETTE TROWBRIDGE, *Assistant in the Gymnasium.*

Graduate of the Anderson Normal School of Gymnastics, 1895; Instructor in Gymnastics, Newburgh and Poughkeepsie Young Women's Christian Associations, 1895-99; Instructor in the Chautauqua School of Pedagogy, 1895-98.

MARTHA E. OSMOND, M.D., *Physician of the College.*

M.D., Woman's Medical College of Pennsylvania, 1898; Johns Hopkins Medical School, 1899; Resident Physician, Evening Dispensary for Women and Girls, Baltimore, Md., 1898-99; Clinician, the Alumnae Dispensary, Philadelphia, Pa., 1899-1900.

GEORGE S. GERHARD, M.D., *Consulting Physician of the College.*

ISABEL ELY LORD, B.L.S., *Librarian.*

B.L.S., New York State Library School, 1897.

JULIA A. HOPKINS, *Assistant Librarian.*

Student, New York State Library School, 1895-96; Reference Librarian, Reynolds Library, Rochester, N.Y., 1896-99.

ISABEL MADDISON, B.Sc., Ph.D., *Secretary to the President and Reader in Mathematics.*

B.Sc., University of London, 1893, and Ph.D., Bryn Mawr College, 1896; Graduate Student in Mathematics, Bryn Mawr College, 1892-93, and Fellow in Mathematics, 1893-94; Holder of the Mary E. Garrett European Fellowship and Student in Mathematics, University of Göttingen, 1894-95.

---

\* Granted leave of absence for the year 1899-1900.

MARY HELEN RITCHIE, A.M., *Secretary of the College.*

A.B., Bryn Mawr College, 1896, and A.M., 1897; Graduate Scholar in Greek and Latin, Bryn Mawr College, 1896-97; Graduate Student in Greek and Latin, 1897-98, and Fellow in Latin, 1898-99.

ELIZABETH NIELDS, A.B., *Recording Secretary.*

A.B., Bryn Mawr College, 1898.

FREDERIKA M. KERR, *Bursar.*

ANNA BELL LAWTHER, A.B., *Assistant Bursar..*

A.B., Bryn Mawr College, 1897.

ELLEN SETON OGDEN, L.B., *Junior Bursar.*

L.B., University of Nashville, 1895; Bryn Mawr College, 1896-98, and 1899-1900.



## FOURTEENTH ANNUAL REPORT.

### *To the Board of Trustees:*

The President of the College respectfully submits the following report for the fourteenth academic year of Bryn Mawr College, from October 1st, 1898, to September 30th, 1899.

The sudden death of M. Ida Garber on December 24th of heart disease was deplored by all who knew her. She had served the college faithfully and efficiently for five years as Mistress of Pembroke Hall West, and had just entered on her duties for the current year as Junior Bursar, or steward, a position newly created by the Trustees. Her intimate acquaintance with the conditions of life in our halls of residence, her practical knowledge of the Philadelphia markets, and her unusual executive abilities fitted her in a peculiar manner for this responsible position. Her loss will be greatly felt. Ellen Seton Ogden, L.B., was appointed Junior Bursar for the remainder of the year.

The Trustees gave much time during the year to the consideration of the material equipment of the college, and the necessity of providing for its present needs and future growth. During the preceding year the President of the College had laid before the Executive Committee a carefully prepared statistical statement of the net return, over and above the cost of maintenance and repairs, received from principal funds invested in the college halls of residence since 1885. After a full discussion and detailed examination of this statement, the Executive Committee had forwarded it to

the Board with their approval, and a recommendation that the Trustees should cordially co-operate with our neighbors and friends in their efforts to secure for the college the gift of the stock and a certain proportion of the bonds of the Bryn Mawr Hotel Company, in order that as soon as more accommodation for students should be needed the hotel might be used for a hall of residence for students in the winter, and rented, as at present, for an hotel in the summer when the college was closed. In the report of the Executive Committee it was stated that it was expected that the room rent yielded by the hotel during the winter when used for students and the rent during the summer would pay the interest on such of the outstanding bonds of the Bryn Mawr Hotel Company as should not be presented to the college, and would in addition afford a surplus which would enable the Trustees gradually to pay off these bonds and free the property from debt, and thus eventually to secure for the college an unencumbered property of great value. The Trustees approved of the report of the Executive Committee and agreed to accept the gift when it was formally offered to the college. The Hon. William Righter Fisher, the president of the Hotel Company, Mr. John H. Converse, and many other friends and neighbors, all of whom were owners of the hotel stock, interested themselves in the matter, and an option, on practically all the stock was secured, and gifts of many of the bonds were promised. The negotiations, however, finally failed, to the great disappointment of all those interested in the expansion of the college.

The President of the College felt so much encouraged by the cordial and generous attitude of the many friends who had wished to make us this great gift, and by the emphatic approval given to the plan by the majority of the Trustees, that in the year covered by this report she again

presented for the consideration of the Trustees other plans for providing for the growth of the college.

The need of increased accommodation was patent to the most casual observer. All the lecture rooms were overcrowded; in many of the larger classes students were compelled to sit in the window sills, or on chairs temporarily placed in the aisles; many lectures could not be held at convenient hours because of lack of class rooms in which to hold them; it was evident to every one connected with the college that it would be necessary to remove the library and reading rooms from Taylor Hall in order to provide more lecture rooms. The arrangements for the library have been from the first very inadequate. The original plans did not include any provision for books or readers, and in the last few years the library has entirely outgrown its temporary quarters. Books are scattered throughout Taylor Hall, and many of the lecture rooms are lined with bookshelves. The main reading room, made by throwing together three large lecture rooms, is too small to accommodate readers, and for this reason the faculty and many of the students have practically given up using it.

The need of a new library building had already been emphasised in the president's report for 1894-95, and in the colleg year, 1897-98, the undergraduates, realising the great straits to which we were reduced, raised \$100 and handed it over to the Trustees as the nucleus of a library subscription fund. This need has been growing yearly more urgent. The question of maintaining a separate library building, if it could be obtained, was now carefully considered and the suggestion of the President of the College that not only a library building but also a new hall of residence should be begged for was approved. The Trustees again examined the financial statements of the halls of resi-

dence and satisfied themselves that for the preceding thirteen years they had yielded each year a fair return on the money invested in them. It was accordingly decided to ask for the gift of a new hall of residence in order to accommodate the increasing number of resident students, and to provide sufficient annual income to meet the additional expense of heating, lighting, and caring for the new library building. The Board at this time placed itself on record as approving of a new academic building and a new hall of residence.

Historically, this decision is of great interest because, when the Trustees voted in May, 1893, to erect the large double hall of residence, known as Pembroke West and East, containing accommodation for one hundred and thirty students, there was considerable difference of opinion in the Board as to whether the number of resident students should be increased by the addition of another dormitory. The students at that time numbered 202. When Pembroke Hall was built the line was crossed dividing a small, from a large, resident college, but some of the Board thought that the college might still be limited to the students that could be then accommodated. At this time a resolution was unanimously passed declaring that in the opinion of the Trustees, after the completion of Pembroke Hall, all the buildings necessary to maintain the college would have been erected. According to the will of the Founder of the College, Dr. Joseph W. Taylor, the passing of such a resolution by the Board of Trustees set aside the remainder of the estate left by him to the college as a permanent endowment fund which could not be drawn on in future for any new buildings, or used even in an emergency. During the five years that have elapsed since the passing of this resolution the logic of events has convinced the Trustees of the need of another academic building affording accommodation for books, readers, seminary rooms, and



professors' rooms, and also of the desirability of another hall of residence. A central system of heating and electric lighting is also a necessity if the college buildings are to be efficiently and economically managed. A students' building is also greatly needed for the various students' activities such as Christian Union meetings, Bible classes, glee club and banjo club practice, and entertainments of all kinds, including class suppers and class plays. This building was recommended in the president's report of 1897-98, and it was suggested that it was a peculiarly suitable gift to be made to the college by the alumnæ and present and former students. But it seems evident now that all other needs are secondary to the need of a library building.

In the autumn of 1898 the President of the College met the Board of Directors of the Alumnæ Association of Bryn Mawr College and asked for their assistance in begging for a library building and hall of residence, and requested them, if it met with their approval, to bring the subject before the alumnæ at the next meeting of the Association. The Board of Directors cordially approved the plans, and recommended to the Association that large begging committees should be formed to co-operate with the Trustees and the President of the College in securing funds.

Another important step in the future development of the college was taken when the Board, on the recommendation of the Committee on Buildings and Grounds, approved in its general outlines and details the map of the college grounds containing the location of the future buildings and the plans for roads, paths, planting, etc., prepared originally by Mr. Frederick Law Olmsted and completed by his son, Mr. John C. Olmsted. This map was a gift to the college from Miss Garrett, and was begun with the approval of the Trustees in

1894, but was not completed and presented to the Board until the present year.

The Board approved of the policy of appointing in future only college graduates, and whenever possible graduates of Bryn Mawr College, as mistresses of the college halls of residence. Our experience has proved that except in very exceptional cases women who have had no experience of college life cannot sympathise as fully with the aims of college students, and cannot exert the same influence over them, as those who have similar intellectual interests. It was long ago recognised in colleges for men, that it was wholly unsuitable to place in positions of authority over college boys men who were not themselves college graduates, on account of the lack of sympathy caused by the difference in intellectual training and point of view; whereas it has been wrongly supposed that good social traditions and housekeeping proclivities were sufficient qualifications to enable women to exert a potent influence for good over college girls. It is strange that Bryn Mawr College has been the first college for women to recognise that with young women, as with young men, the best results are attained when they are able to sympathise intellectually with those whose judgments they are asked to accept in matters of conduct and social usage.

The question of the inadequacy of the fees paid by the students was considered by the Trustees. When the college opened in 1885 the tuition fee was fixed at \$100 for all students, resident and non-resident, table board at \$150 and room rent for single rooms at \$100, or for resident students living in single rooms a total charge of \$350. In the year covered by this report table board has been raised from \$150

to \$175 a year in order to cover the actual cost of provisions and dining-room service, and the tuition fee has been raised from \$100 to \$125 a year for students entering the college in the autumn of 1898. It is already evident to the Trustees that it will be necessary to raise the tuition fee again within the next few years.

It has seemed wise to the Trustees to impose a fee of \$5 for conditioned collegiate examinations, and for advanced standing examinations in subjects which have not been pursued in other colleges or before entering Bryn Mawr College. These fees are to be added to the annual appropriation made for the purchase of books for the library. Members of the faculty must make out special papers for all these examinations, and it seems just that the students should pay for this additional labor. It is also hoped by the imposition of this fees to prevent students from attempting such examinations without careful preparation, and trying them as often as is permitted by the rules of the faculty on the chance of passing them.

The Trustees voted to change the beginning of the fiscal year of the college, from September 1st to October 1st, in order to include the work of each summer vacation in the college year to which it belongs. This change will greatly assist the Committee on Buildings and Grounds in preparing accurate estimates of the cost of work to be done in each fiscal year.

The question of the oral examination of seniors in French and German as a requirement for the bachelor's degree was considered by the Faculty, who voted by a majority vote, a large minority dissenting, to forward to the Trustees with a favorable recommendation the petition of the students to abolish these examinations, which had been established by the

Trustees at the opening of the college. After a careful consideration of the whole subject, the Trustees voted to request the Faculty to continue the oral examinations in the senior year, and referred the matter back to them with the suggestion that they should pass such regulations for the conduct of these examinations as should seem best. The Faculty accordingly voted that in future the oral examinations should be held at four stated times during each year in the presence of the President of the College, a member of the French or German department, and one other member of the Faculty appointed by the President. They further approved of lists of private reading in French and German drawn up by the professors of French and German to be read during the three summer vacations of the college course, and recommended that this reading should be done in the manner prescribed. It is believed that these regulations will be of great service in assisting the students to prepare for the oral examinations gradually and without strain. It is a matter of congratulation that the oral French and German examinations have been maintained by the Trustees. They have long been a feature peculiar to Bryn Mawr College and have ensured, as nothing else could ensure, to all the graduates of the college, in the classical and scientific as well as in the modern language courses, a practical reading knowledge of French and German at the time of their graduation. This knowledge is not possessed at present by *all* the graduates of any other American college. It would distinctly lower the value of the Bryn Mawr degree, and greatly impair the efficiency of the education given to our graduates if this most useful practical requirement were done away with.

The Trustees approved of the recommendation of the Faculty that all full professors and associate professors should

be required to wear caps and gowns on official occasions. They also approved of the hoods and gowns recommended by the Faculty for the various degrees awarded by the college, and of the hoods prescribed by the Faculty for those of its members who had received doctor's degrees from foreign universities. These gowns and hoods are in the main those adopted by other American universities and colleges. The holders of foreign degrees from German and French universities where doctors' hoods are not conferred were authorised to cross the blue lining of the doctors' hood signifying the philosophical faculty with a chevron composed of the colours of the flag of the country in which the university conferring the doctor's degree is situated. It is an interesting fact that this action of the Faculty was taken as a result of a petition from the students sent to the Faculty in May, 1898, asking that the Faculty should wear caps and gowns. The whole student body of Bryn Mawr has worn caps and gowns from the opening of the college in 1885 and is, so far as known to me, the only body of college students in the United States that wears them habitually to daily lectures and recitations. Many years elapsed before any other women students wore caps and gowns, and even at men's and women's colleges where they are now worn they are usually worn only by seniors at commencement. The gowns worn at Bryn Mawr College are copied from an Oxford scholar's gown brought over from England in the autumn of 1885 by Alys Pearsall Smith, now the Hon. Mrs. Bertrand Russell, and through her influence adopted by the students as their daily academic dress. Since the above action was taken by the Faculty, the President of the College has worn cap and gown at morning chapel and on all other formal occasions.

The Faculty also gave much consideration during the year to two subjects that had presented great difficulty in the past, the regulation of the passing off of entrance conditions imposed on freshmen, and the regulation of absences of students from college lectures before and after vacations. The examinations of Bryn Mawr College have been found to be so difficult that it has proved necessary to admit students who were somewhat below the passing mark in four out of the fifteen subjects required for entrance. The Faculty has endeavoured in various ways to insist that the students should make up these deficiencies before the beginning of their sophomore year; and finally in October, 1894, enacted drastic legislation excluding from college sophomores who had failed to pass off their entrance conditions. This proved to be a great hardship, students sometimes journeying across the continent only to return home in consequence of an unexpected failure to pass off an elementary examination. In February, 1899, the rule was modified so as to permit such students to re-enter the college, on condition that they should register for only thirteen, twelve, ten, or eight hours of college work, the amount varying with the number of conditions, and should employ a tutor recommended by the office until the condition should be passed off, for the number of hours a week that they were compelled to omit from their regular registration of fifteen hours. It is believed that this rule will meet the difficulty far better than it has ever been met before.

In March, 1899, the Faculty adopted a method of registering students by cards at the beginning of the college year, and at the last lecture before, and the first lecture after, the Thanksgiving, Christmas, and Easter vacations, and imposed as a penalty for late registration the deferring of one, or more, of the semester's examinations to one of the following examina-

tion periods, the course deferred, and the period to which it was deferred, to be proportioned to the gravity of the offense. Every effort to persuade the students themselves to regulate their absences had previously failed, dentists' and dressmakers' appointments, friends' weddings, and many other engagements, having apparently combined to detain them at home. The Faculty became convinced that it was not possible for the students to control their families in this respect, and this rule was passed in order to protect the students from unnecessary interruptions to their college work and to ensure an unbroken year of college work for all students.

During the spring of 1899 the President of the College after consultation with the mistresses of the halls of residence decided with the approval of the Trustees that the massing of classes in the different halls of residence must be broken up. Experience had proved it to be very undesirable for all the seniors to live in one hall, all the juniors in another hall, and all the sophomores and freshmen in the halls deserted by the seniors and juniors. Not only was the association between younger and older students much interfered with, but discipline was fast becoming a serious problem. The Students' Association for Self Government seemed unable to work to advantage when waves of class spirit swept over a hall. Class feeling is very strongly developed in all American residential colleges, and this class spirit seemed to be much intensified by the close association of living in the same hall of residence and eating together in the same dining hall three times daily.

A rule was therefore made to the effect that, although no students would be deprived of the rooms they then occupied, in and after the autumn of 1899 only one-fourth of the undergraduate rooms in each hall should be chosen by

lot by the members of any one of the four classes, and that a wing in each hall should as heretofore be reserved for graduate students. By this arrangement graduates, seniors, juniors, sophomores, and freshmen will in future live together in each hall in equal numbers, and it is hoped that the delightful student companionship of older and younger classes will be revived as a feature of our college life. The storm of opposition and protest that broke loose astounded everyone except the President of the College, who had fully realised how dear to the students were the present undesirable conditions. Undergraduate mass meetings were held day after day, at one of which the president addressed the students. Many of the staff entreated the president to retire from the position she had taken and not risk the unpopularity of the new regulations. Only when the students realised the hopelessness of further agitation did they become calm enough to listen to argument. Before the close of the college year however many of the older students had come to see the undesirableness of the existing conditions.

The Trustees accepted the generous offer of Dean Clarence D. Ashley, Professor of Law and Dean of the Faculty of Law in New York University, to teach a class in the law of contract without expense to the college. The aim of the course will be to train the class in accurate legal thought, and incidentally to impart a knowledge of the principles underlying the subjects discussed. The class will be taught exactly like a class of professional students. If this course is successful it is hoped to expand the work in law, and to make it one of the regular group courses that may be elected by undergraduates and combined as a group with history or economics. Dean Ashley made this offer immediately after an address made by the President of the College at the commencement



of the Woman's Law Class of New York University in which she suggested that as it was peculiarly desirable for women to reason clearly courses in law were probably the best means known of teaching them to weigh the evidence on both sides of a question and to think straight. Dean Ashley had long held the opinion that law should be taught to both men and women college students, and offered to try the experiment at Bryn Mawr College. He states that this will be the first time that law has been introduced into a general college course for a purely educational purpose. The course will be open as a free elective to all undergraduate students. Dean Ashley will also conduct graduate courses in law.

Professor Edward H. Keiser resigned the chair of chemistry, which he had occupied from the opening of the college in 1885, as associate professor for six years and as full professor for eight years, in order to accept the professorship of chemistry in Washington University, St. Louis. The Trustees made Dr. Elmer P. Kohler, Associate Professor of Chemistry, who had been connected with the department since 1892, the head of the department, and appointed Dr. Allerton S. Cushman, Associate in Chemistry.

The Trustees appointed Dr. Albert P. Wills, Associate in Applied Mathematics and Physics. It is expected that Dr. Wills will offer in connection with courses in physics post-major and graduate work in applied mathematics, a subject to which singularly little attention is paid in American universities.

The Trustees established an Associateship in Classical Art and Archæology and appointed Dr. Joseph Clark Hoppin to the chair. In 1895-96 a lectureship in this subject was created and filled for two years by Mr. Richard Norton who aroused great interest in the subject, his courses being elected by about one-fourth of all the undergraduate students. The

amount of \$2,150 was spent under the direction of Mr. Norton in equipping the department with books and photographs. The courses in art were intermitted during the year 1897-98, and resumed under a non-resident lecturer, Dr. John Homer Huddilston, during the current year pending a permanent appointment. It cannot be too strongly emphasised that the study of Greek and Latin must go hand in hand with the study of ancient art and archæology if they are to maintain even their present place in the college curriculum.

The Trustees appointed George S. Gerhard, M.D., an eminent physician of Ardmore, Consulting Physician of the College, with the understanding that he should be consulted in all serious cases of illness, and that other physicians should practise in the college with this distinct understanding.

By order of the Trustees, Dalton Hall, containing the laboratories of the scientific departments, was closed at 6 P. M. on November 14th, and thereafter. Up to this time it had been kept open until ten o'clock every evening, but with the increasing numbers of students it became difficult to watch the building properly, and also the risk of fire seemed to the Trustees unduly great. Taylor Hall, containing the library and seminary libraries, is open daily on weekdays from 7 A. M. to 10 P. M., and on Sundays from 2 P. M. to 10 P. M.

The annual conferring of degrees took place on June 8th, the address being delivered by Dr. Edward Everett Hale, on "Personal Reminiscences of Five American Poets." Seven students received the degree of Master of Arts; five having received the degree of Bachelor of Arts of Bryn Mawr College in 1898, and two in 1896. Three students passed their examinations for the degree of Doctor of Philosophy, two having received the degree of Bachelor of Arts at Bryn Mawr

College. A list of the degrees conferred in the year, 1898-99, and of the fellowships and scholarships awarded for the year, 1899-1900, will be found in the second and third appendices to this report.

A complete list of the clergymen who have been invited by the Trustees to preach before the students during the past year and of the speakers who have addressed the college as a whole or the various students' clubs or associations will be found in the fourth and fifth appendices.

The members of the Association of Collegiate Alumnæ were entertained at luncheon in Pembroke Hall as the guests of the College during their annual meeting in Philadelphia in November, 1898, and one meeting of the Association was held in Taylor Hall.

The Alumnæ Association of Bryn Mawr held its annual meeting at the college in February, 1899, for the first time, the annual meeting having hitherto been held at the time of the conferring of degrees. After the meeting the Alumnæ Association lunched at the Deanery on the invitation of the President of the College to meet the Academic Committee. The autumn and spring receptions were held as usual in the central dining-room and reception rooms of Pembroke East and Pembroke West.

The entire number of students enrolled during the year was 354. There were sixty-seven graduate students, including fellows. The number of graduates was nearly 19 per cent. of the whole number of students and showed a gratifying increase of about 37 per cent. over the number of graduate students studying in the college last year.

*Comparative Table of Number of Graduate and Undergraduate Students from 1885 to 1899.*

Year.	Graduate Students.	Undergraduate Students.	Total Number.
1885-86 .....	8	36	44
1886-87 .....	10	54	64
1887-88 .....	8	70	78
1888-89 .....	16	100	116
1889-90 .....	22	100	122
1890-91 .....	12	120	132
1891-92 .....	27	142	169
1892-93 .....	34	168	202
1893-94 .....	43	200	243
1894-95 .....	49	234	283
1895-96 .....	52	246	298
1896-97 .....	46	243	289
1897-98 .....	49	275	324
1898-99 .....	67	287	354

The sixty-seven graduate students enrolled during the year came from the following states and countries:

Pennsylvania .....	19	Connecticut .....	1
New York .....	9	Kentucky .....	1
Illinois .....	5	North Carolina .....	1
Indiana .....	4	Tennessee .....	1
Iowa .....	4	Texas .....	1
Maryland .....	4	Vermont .....	1
Massachusetts .....	4	Virginia .....	1
Maine .....	3	Canada .....	2
Ohio .....	3		—
Kansas .....	2	Total .....	67
California .....	1		

These sixty-seven graduate students may be classified as follows: two non-resident, holding European fellowships and studying abroad; one, holding a European fellowship studying at Bryn Mawr College; nine holding resident fellowships; twelve holding graduate scholarships; six members of the college staff, and thirty-seven graduate students holding no official appointment from the college. Four of the above students held the rank of Fellow by Courtesy, having previously held resident fellowships in the college. Forty-four were resident and twenty-three non-resident.

*Number of Years of Graduate Study.*

- 34 in their first year of graduate study.
- 19 in their second year of graduate study.
- 9 in their third year of graduate study.
- 1 in her fourth year of graduate study.
- 2 in their fifth year of graduate study.
- 1 in her seventh year of graduate study.
- 1 in her eighth year of graduate study.

---

67

*Studies Elected by 67 Graduate Students.*

English	.....	25	students.
History	.....	10	"
Biology	.....	10	"
Greek	.....	9	"
Latin	.....	9	"
Philosophy	.....	9	"
French	.....	7	"
Mathematics	.....	7	"
Chemistry	.....	7	"

German .....	6	students.
Biblical Literature and Semitic Languages .....	6	"
Archæology .....	6	"
Physics .....	6	"
Spanish .....	4	"
Teutonic Philology .....	3	"
Romance Languages .....	3	"
Political Science .....	2	"
Italian .....	1	"
Psychology .....	1	"
Education .....	1	"

The 287 undergraduate students enrolled during the past year came from the following states and countries:

Pennsylvania .....	106	Rhode Island .....	3
New York .....	41	Colorado .....	2
Massachusetts .....	29	Maine .....	2
New Jersey .....	15	Utah .....	2
Maryland .....	12	Alabama .....	1
Ohio .....	10	Delaware .....	1
Connecticut .....	9	Iowa .....	1
Illinois .....	7	Nebraska .....	1
Indiana .....	6	New Hampshire .....	1
District of Columbia ..	5	North Carolina .....	1
Michigan .....	5	Tennessee .....	1
Virginia .....	5	Wisconsin .....	1
Kentucky .....	4	France .....	1
Oregon .....	4	Japan .....	1
Texas .....	4		
California .....	3	Total .....	287
Missouri .....	3		

These 287 undergraduates may be classified as follows: 236 resident, 51 non-resident, 278 candidates for a degree, 9 hearers.

Of the 278 candidates for a degree 41 were Seniors and received their degree in June; 66 were Juniors; 84 were Sophomores, and 87 were Freshmen.

In addition to those who were graduated 39 undergraduates left during the year, or at its close, for the following reasons:

On account of ill health .....	5
To go to other colleges .....	4
Planned not to take the full course .....	4
Heavily conditioned .....	3
Needed by family .....	3
For financial reasons .....	2
Engaged to be married .....	1
Did not enjoy college life .....	1
To take up teaching .....	1
Work for degree could be completed with- out attendance .....	1
Reasons not stated .....	14
	—
Total .....	39

The distribution of the 354 graduate and undergraduate students among the several departments was as follows: Sanskrit and Comparative Philology, 1; Greek, 35; Latin, 101; English Literature, 264; Anglo-Saxon, 5; German, 72; Teutonic Philology, 7; French, 64; Romance Philology, 6; Italian, 19; Spanish, 11; Semitic Languages and Biblical Literature, 14; History, 105; Political Science, 68; Philosophy, 91; History of Education and Pedagogy, 3; History of Art and

Classical Archæology, 36; Mathematics, 43; Physics, 32; Chemistry, 43; Geology, 8; Biology, 58.

The denominational affiliations of all the graduate and undergraduate students were as follows:

Affiliations.	Graduate.	Under-graduate.	Total.
Episcopalian . . . . .	10	95	105
Presbyterian . . . . .	16	61	77
Unitarian . . . . .	6	23	29
Congregationalist . . . .	7	15	22
Quaker . . . . .	8	14	22
No denomination . . . .	3	17	20
Methodist . . . . .	6	11	17
Baptist . . . . .	4	12	16
Not stated . . . . .	1	7	8
Hebrew . . . . .	0	8	8
Lutheran . . . . .	2	4	6
Dutch Reformed . . . .	0	5	5
Roman Catholic . . . .	0	5	5
Swedenborgian . . . . .	0	4	4
Reformed . . . . .	1	2	3
Christian . . . . .	1	1	2
Universalist . . . . .	1	1	2
Moravian . . . . .	0	1	1
Reformed Episcopalian	1	0	1
Christian Scientist . . .	0	1	1
	<hr/> 67	<hr/> 287	<hr/> 354

*Statistics of Senior Class.*

At Commencement, June, 1899, the degree of Bachelor of Arts was conferred on 43 students, two of whom completed



the requirements in February, 1899. Their courses may be analysed as follows:

Number of Students.	Years Spent on Course.	Entered.	Semesters absent from College.
31	4	October, 1895	None
1	3½	October, 1895	1
1	3½	February, 1895	2
1	3½	February, 1894	4
2	4	February, 1895	1
1	4	October, 1894	2
1	4	October, 1888	14
1	4½	February, 1895	None
1	4½	October, 1894	1
1	4½	February, 1894	2
1	5	October, 1893	2
1	6	October, 1891	4

75 students entered the college in October, 1895. Of these 32, or 43 per cent., were graduated within four years.

The average age of the graduating class was 23 years and 2.4 months.

The median age of the graduating class was 22 years and 4 months.

The groups elected by the graduating class were as follows:

History and Political	Greek and Latin . . . . .	2
Science . . . . .	20 Latin and German . . . . .	1
Chemistry and Biology .	8 Latin, Italian and Span-	
Latin and French . . . . .	4 ish . . . . .	1
English and German . . .	1 Philosophy and Mathe-	
Political Science and	atics . . . . .	1
Philosophy . . . . .	1 Physics and Chemistry . .	1
German and French . . . .	2	—
Latin and English . . . . .	1 Total . . . . .	43

*Statistics of Freshman Class.*

The Freshman class numbered 87, 81 having entered in October, 1898, and 6 in February, 1899. The statistics of the two divisions are given separately.

*Table of Conditions.*

	Entered in October.	Entered in February.
Clear .....	11	1
Clear except punctuation or spelling .....	10	..
1½ condition .....	7	..
1 condition .....	15	1
1½ conditions .....	4	1
2 conditions .....	7	..
2½ conditions .....	5	..
3 conditions .....	10	..
3½ conditions .....	8	1
4 conditions .....	1	1
Honorable dismissal from other colleges .....	3	1
	—	—
Total .....	81	6

Freshmen entering the college without conditions, 13.58 per cent.; entering with no conditions except punctuation and spelling, 12.35 per cent, or 25.93 per cent entering with no conditions except punctuation and spelling.

*Comparative Table of Percentage of Freshmen Entering  
Without Matriculation Conditions.*

October, 1890—October, 1898.

(This table includes only those entering in October of each year and takes no account of conditions in punctuation and spelling.)

In 1890 .....	25.0%	In 1895 .....	19.0%
In 1891 .....	22.8%	In 1896 .....	21.8%
In 1892 .....	32.0%	In 1897 .....	31.8%
In 1893 .....	23.1%	In 1898 .....	25.93%
In 1894 .....	19.3%		

*Table of Preparatory Schools that Prepared 78 Freshmen.*

(Arranged according to sections of country in which the college offers matriculation scholarships. Six Freshmen entered by private study and three by honorable dismissal from other colleges.)

*New England States:*

	Entering in October.	Entering in February
Rosemary Hall, Wallingford, Conn. ....	4	
Bangor High School, Bangor, Me. ....	1	
Bellows School, Portland, Me. ....	1	
The Cambridge School, Cambridge, Mass. . .	1	
Miss Folsom's School, Boston, Mass. ....	1	
Miss Low's School, Stamford, Conn. ....	1	
Plymouth High School, Plymouth, Mass. . .	1	
Miss Wheeler's School, Providence, R. I. . .	1	
Miss Willard's School, New Haven, Conn. . .	1	

1st Matriculation Scholarship won by pupil of Miss Winsor's School, Boston, Mass. (This student deferred entering the college, so her school is not included in the above list.)

2nd Matriculation Scholarship won by pupil of Bellows School, Portland, Me.

*New York, New Jersey, and Delaware:*

	Entering in October.	Entering in February.
Brearley School, New York City . . . . .	3	
Miss Bazley's Private School for Girls, Tren- ton, N. J. . . . .	1	
Miss Eaton and Miss Wilson's School, New York . . . . .	1	
Miss Hebb's School, Wilmington, Del. . . . .	1	
The Horace Mann School, New York City . .	1	
Rochester Free Academy, Rochester, N. Y. .	1	
St. Gabriel's School, Peekskill, N. Y. . . . .		1
State Model School, Trenton, N. J. . . . .	1	
	—	—
	9	1

1st Matriculation Scholarship won by pupil of Brearley School, New York City.

2nd Matriculation Scholarship won by pupil of Dr. Sachs's School for Girls, New York City. (This student deferred entering the college, so her school is not included in the above list.)

*Pennsylvania:*

	Entering in October.	Entering in February.
Miss Baldwin's School, Bryn Mawr, Pa. . . .	16	1
The Misses Shipley's School, Bryn Mawr, Pa.	7	1

	Entering in October	Entering in February.
Philadelphia Girls' High School . . . . .	5	
Miss Stevens's School, Germantown, Philadel- phia . . . . .	6	1
Miss Hill's School, Philadelphia . . . . .	3	
Friends' School, Germantown, Philadelphia .	1	
Friends' Select School, Philadelphia . . . . .	1	
Miss Gordon's School, Philadelphia . . . . .	1	
Miss Irwin's School, Philadelphia . . . . .	1	
Pelham School, Germantown, Philadelphia .	1	
Pennsylvania School, Philadelphia . . . . .	1	
Philadelphia Collegiate Institute for Girls..	1	
Walton-Wellesley School, Philadelphia . . . .	1	
High School, Lehigh, Pa. . . . .		1
	—	—
	45	4

1st Matriculation Scholarship won by pupil of Miss Florence Baldwin's School, Bryn Mawr, Pa.

2nd Matriculation Scholarship won by pupil of Miss Florence Baldwin's School, Bryn Mawr, Pa.

*Southern and Western States:*

	Entering in October.	Entering in February.
Bryn Mawr School, Baltimore, Md. . . . .	3	
Hathaway-Brown School, Cleveland, Ohio . .	2	
Miss Murison's School, San Francisco, Cal. .	2	
Portland Academy, Portland, Ore. . . . .	2	
Miss Buckingham's School, Canton, Ohio . .	1	
East Denver High School, Denver, Col. . . .	1	

	Entering in October	Entering in February.
Evanston Township High School, Evans-		
ton, Ill. ....	1	
Mrs. Flint's School, Washington, D. C. ....	1	
Fort Wayne School, Fort Wayne, Ind. ....	1	
Girls' Classical School, Indianapolis, Ind. ..	1	
Green Bay High School, Wisconsin ....	1	
Maryland College, Lutherville, Md. ....	1	
Randolph-Harrison School, Baltimore, Md. .	1	
Miss Rolston's School, Sausalito, Cal. ....	1	
Semple Collegiate Institute, Louisville, Ky. .	1	
High School, Salt Lake City, Utah ....		1
High School, San Antonio, Texas.....		1
	—	—
	20	2

1st Matriculation Scholarship won by pupil of Hathaway-Brown School, Cleveland, Ohio.

2d Matriculation Scholarship won by pupil of Girls' Classical School, Indianapolis, Ind.

	Entering in October.	Entering in February.
Private study .....	6	2
Honorable dismissal from other colleges ...	3	
	—	—
Total .....	95	9

In the above list duplicates are included, some students having received their preparation at two or more schools.

*Preparation Received in Private or Public Schools.*

	Entering in October.	Entering in February.
Private Schools .....	58	2
Public Schools .....	8	
Private and Public Schools .....	1	1
Public Schools and Private Tuition .....	3	1
Private Schools and Private Tuition .....	2	1
Private Tuition .....	6	
Honorable Dismissal .....	3	1
	—	—
	81	6

Percentage of Freshmen entering by examination in October who have received preparation for college only in private schools or by private tuition equals 84.61 per cent. of the total number. Percentage of Freshmen entering by examination in February who have received their preparation for college only in private schools or by private tuition equals 60 per cent. of the total number. Total percentage of those entering both in October and in February who have received their preparation for college only in private schools or by private tuition equals 83.13 per cent. of total number.

*Geographical Distribution of Freshman Class.*

	Entering in October.	Entering in February.
Pennsylvania .....	30	2
New York .....	14	1
Massachusetts .....	6	
Ohio .....	6	
Maryland .....	4	
California .....	3	
Connecticut .....	2	
Indiana .....	2	
New Jersey .....	2	

	Entering in October	Entering in February
Oregon .....	2	
Texas .....	2	1
District of Columbia .....	1	
Colorado .....	1	
Utah .....		1
Illinois .....	1	
Maine .....	1	
Michigan .....		1
Kentucky .....	1	
Missouri .....	1	
Virginia .....	1	
Wisconsin .....	1	
	<hr/> 81	<hr/> 6

*Denominational Affiliations of Freshman Class.*

	Entering in October.	Entering in February.
Episcopalian .....	26	4
Presbyterian .....	11	
Unitarian .....	8	
Congregationalist .....	7	
Quaker .....	6	
Methodist .....	5	
Hebrew .....	4	
Dutch Reformed .....	3	
Not stated .....	3	2
Baptist .....	2	
Roman Catholic .....	2	
Lutheran .....	1	
Reformed .....	1	
Swedenborgian .....	1	
Christian Scientist .....	1	
	<hr/> 81	<hr/> 6



*Average and Median Age Freshman Class.*

	81 entering in October.		6 entering in February.	
	Years	Months	Years	Months
Average age .....	19	3	19	10
Median age .....	18	9	20	0
Average age (excluding honor- able dismissal students)....	19	1	19	7
Median age (excluding honor- able dismissal students)....	18	9	19	11

*Groups Registered by Freshmen on Entering College.*

Greek and Latin .....	7	History and Economics	
Greek and English .....	1	and Politics .....	3
Latin and English .....	3	Mathematics and Physics.	1
Latin and German .....	2	Mathematics and Chem-	
English and German ....	1	istry .....	1
English and French .....	1	Chemistry and Biology ..	2
English and Philosophy..	1	(One of above as prelim-	
German, Italian and Span-		inary medical student.)	
ish .....	1		—
			24

A great deal of attention was given by the Trustees to the buildings and grounds of the college.

Low Buildings, the apartment house erected for the use of the women of the college staff was completed in time to be occupied in the autumn of 1898. Thirteen friends of the college formed themselves into a Low Buildings Association for the purpose of erecting this house, and handing it over as a gift to the College as soon as all indebtedness incurred in building it shall have been paid off. Mr. John G. Johnson, the counsel of the college, drew up the form of agreement,

Mr. Henry Tatnall, the Treasurer of the College, and Mr. Theodore N. Ely consented to act as Trustees of the Association, and the Girard Trust Company of Philadelphia issued 25 bonds of \$1,000 each, bearing interest at 5 per cent., to the subscribers as follows: Miss M. Carey Thomas, 5 bonds; Trustees of Bryn Mawr College, 4 bonds; Mr. Richard S. Mason, 3 bonds; Mr. Theodore N. Ely, 2 bonds; Miss Marion Mott, 1 bond; Mrs. E. V. H. Nicholson, 1 bond; Miss Ethel Parrish, 1 bond; Mrs. Isabel M. Parrish, 1 bond; Mrs. Jane H. Richards, 1 bond; Miss Lillian V. Sampson, 1 bond; Mrs. A. V. H. Tappendeck, 2 bonds; Mrs. Mary S. R. Taylor, 1 bond; Mr. John M. W. Thomas, 1 bond; Miss Martha G. Thomas, 1 bond. The Association leased from the Trustees a plot of ground at the southwest corner of the Roberts Road and the Gulph Road about two acres in extent, and erected thereon a three-story shingled apartment house 152 feet long by 34 feet wide, with two wings projecting 12 feet to the front. The house was designed by Mr. Walter Cope, of the firm of Cope & Stewardson, in the Colonial style to accord with the faculty houses on College Hill and the shop, the nearest buildings to it on the college campus. The house contains four private flats with private balconies and private front and back entrances and cellar accommodations, two with eight rooms, and two with nine rooms, including bathrooms, kitchen, servants' rooms, etc.; and seventeen suites of a bedroom and sittingroom each, a double suite of two bedrooms and one sittingroom, a manager's suite, coffee room, kitchen, laundry and servants' rooms. There is a bathroom provided for every two and a half persons, and a fireplace in every sittingroom. It cost the Association \$26,635.63 to build the house; \$3,169.87 to furnish it; \$2,762 to grade and terrace the land, the work being one of great difficulty; and \$432.50 to connect it with an open trench sys-

tem of sewage planned by Waring, Chapman and Farquhar. As the total cost amounted to \$33,000 and exceeded by \$8,000 the amount subscribed by the bondholders, the President of the College lent the extra \$8,000 with the understanding that it should not be repaid, principal or interest, until the bondholders were paid off and Low Buildings became the property of the college.

The halls of residence were so crowded that, as stated in the president's report for the preceding year, it was necessary to open for students Dolgelley and Cartref, two cottages belonging to the college, accommodating each from ten to eleven persons. Mrs. Abby J. Barlow, who had acted as manager of Dolgelley when it was maintained for the women of the college staff before Low Buildings was opened, was appointed Mistress of Dolgelley and Cartref, with the understanding that her daughter, Miss Margaret Barlow, should live in Cartref and act as her assistant. These cottages were run at a loss of about \$850 for 16 resident students.

The Committee on Buildings and Grounds decided that the students' rooms in the halls of residence should be papered, instead of painted in the future. It had been proved that paper was not only much cheaper than paint, but was much more satisfactory to the students, and also required less time to put on. All the rooms had been very much abused by the students and had gradually fallen into a shocking condition. The Committee decided to paper and renovate every summer a certain number of rooms in each residence hall until all the rooms were in good condition, and at the same time to allow the students to have rooms papered at their own expense during the Christmas and summer vacations. With the approval of the Committee the President

of the College and the mistresses of the halls of residence drew up stringent rules for the preservation of the students' rooms that had been renovated, imposing a series of fines for abuse to be used in repairing the damage done. Where the custom obtains, as at Bryn Mawr, among the students of migrating each year from hall to hall, the hardship of occupying for a year a room left in bad condition by a careless student who has moved out of it into another, which she will leave at the end of a second year in an equally disgraceful condition, is very great.

The Executive Committee also voted that in the interest of hygiene no more carpets should be bought for the students' rooms, but that the floors should be refinished and polished with wax, in order that they might be in suitable condition for use with rugs to be provided by the students themselves or without rugs in case of need. The cost to the college is about the same as providing carpets, as it will be necessary to rewax the floors each summer, but the advantages of cleanliness are very great. After the autumn of 1900 it was decided that no more carpets for students rooms should be provided by the college.

The total gas bill of the college was reduced during the current year by considerably over one-fifth by the introduction of Welsbach burners in the halls of residence and academic buildings, and the general lighting of the college was greatly improved.

A large number of repairs were made to the college buildings during the summer.

The tower and chimneys of Taylor Hall were repointed for the first time since the hall was built in 1880.

The swimming tank in the gymnasium was connected

with the rainwater cistern near Merion Hall so that the water to fill it will no longer be pumped from the spring at the lower part of the college campus, as it was feared that the neighborhood of the Low Buildings sewage might in time affect the purity of the spring.

In addition to the usual repairs in the halls of residence several extensive improvements were made. Rooms for men servants, one room in each hall, were built in the basements of Merion and Denbigh, it having proved necessary to employ a man in each hall to build fires in the students' sittingrooms, to handle trunks and to wash windows.

In Merion Hall the woodwork of the inside shutters and sills on the first floor was scraped and refinished, a very tedious and expensive job, as it had been permitted to go uncared for so long that the sun had burned into the wood; a closet was built on the fourth floor and a gas cake griddle was put in the upstairs pantry.

In Radnor Hall seventeen rooms were papered, in accordance with the decision of the Committee on Buildings and Grounds.

In Denbigh, a metal ceiling was put up in the maids' dining room, the walls and ceiling of the entrance hall were painted, the kitchen was repainted and the range reset. Closets were built in the hall nursery.

In Pembroke East and West extensive repairs were made. In accordance with the decision of the Executive Committee the carpets were taken up, all the floors of both Pembroke East and West were put in excellent condition; the non-resident students' sittingroom was made into two bedrooms to provide for more resident students; one of the music rooms in Pembroke East was assigned to the non-residents as a sittingroom, an uncomfortable arrangement which can be only temporary; the gutters behind the wall of Troy coping which

had given constant trouble since the hall had been built were entirely remodelled, the grade changed, tin renewed, the valleys cemented, the rain water pipes repaired and renewed; the central tower was repainted; the outside woodwork of both Pembroke East and West was given one heavy coat of paint; the maids' bedrooms, kitchen and pantries were repainted; the smokestack was cleaned and painted; a part of the ornamental plaster ceiling in the dining room was renewed, the freight lift shaft was lined with wood and a door cut into one of the pantries; a bathroom for the men servants was constructed in the basement; a large linen closet was built in the third floor; the boiler room was shut off by a door from the basement of Pembroke West, and the boilers were regulated by a new system of dampers, which has worked exceedingly well.

A number of changes were made in Dolgelley and Cartref to fit them for students' dormitories. A two hundred gallon hot water boiler with a dwarf novelty heater was installed in the cellar of Dolgelley to give an ample supply of hot water; a new laundry stove and new hotel range were put in and a large copper sink was built in the pantry. Two dormer windows were cut in the roof of Cartref in order to light two third-floor rooms and make them suitable for students' use. The woodwork of all the inside shutters, wooden sills, and all other woodwork inside the house was scraped and refinished, proving to be—like the woodwork of Merion Hall—a very expensive piece of work. Cartref was also completely refurnished, as was stated in the last president's report.

There were no unusual repairs made to the other houses. The Deanery plumbing was partially renewed. Gwynfa was partly repapered.

In addition to the routine work on the college grounds some few improvements were made.

The work on the skating pond done last summer proved

effective and the pond was flooded at Thanksgiving time and kept filled until March 15th, and afforded excellent skating for the students. The ice was kept clear of snow by the Students' Athletic Association.

In the spring of 1898 a plot of ground on the Gulph Road near the corner of the Roberts Road, opposite Low Buildings, was rented from the Pennsylvania Railroad for use as a college trash crematory. It was enclosed with a post and rail fence and screened from view by evergreens and shrubs. A pit twelve feet in diameter by six feet in depth was dug and lined with brick for burning trash, and another pit for tin cans and salable trash was dug, walled about and roofed over to protect it from the weather. The pit is emptied without expense to the college.

A section of the campus, comprising about one-half acre between Taylor Hall and Pembroke East, where it has never been possible to get grass to grow was dug out to the depth of eighteen inches, heavily manured and reseeded in accordance with the directions of Mr. John C. Olmsted at a cost of about \$250 for the half acre.

The attention of the Trustees is especially called to the full information in regard to the working of the college during the past year given in the appendix to this report. The appendix contains the list of reappointments and changes in the instructors and officers for the year 1899-1900; a list of the fellowships and scholarships awarded for the year 1899-1900; the names of candidates receiving degrees during the year; a list of the speakers who have addressed the college; a list of the college preachers during the year; the gifts made to the college during the year; the titles of the scientific publications of the faculty during the year; a tabular summary of the courses of instruction; a comparative statement of

the distribution of students in the various departments of study during the past fourteen years; and reports made to the President of the College by the professors and instructors on the various academic departments, and also the reports of the Librarian, and of the Director of Physical Training.

Respectfully submitted,

M. CAREY THOMAS.

October 20th, 1899.



## APPENDICES.

---

### I.

#### *Promotions, Reappointments, and Changes in the Academic and Administrative Staff for the Year 1899-1900.*

EDWARD H. KEISER, PH.D., Professor of Chemistry, resigned to accept the Professorship of Chemistry in Washington University.

HERBERT WEIR SMYTH, PH.D., Professor of Greek, granted leave of absence for one year to accept the Professorship of the Greek Language and Literature in the American School of Classical Studies in Athens.

JOSEPH AUGUSTE FONTAINE, PH.D., Professor of French, granted leave of absence for one year on account of ill health.

GORDON J. LAING, PH.D., Lecturer in Latin, resigned to accept Instructorship in Latin in the University of Chicago.

WILMER CAVE FRANCE, PH.D., Reader in Classical Literature, promoted to be Associate in Classical Literature.

JOHN HOMER HUDDILSTON, PH.D., Lecturer in Archæology, term expired.

JOSEPH CLARK HOPPIN, PH.D., appointed Associate in Classical Art and Archæology.

ROBERT SOMERVILLE RADFORD, PH.D., appointed Associate in Latin Literature.

ALLERTON S. CUSHMAN, PH.D., appointed Associate in Chemistry.

ALBERT P. WILLS, PH.D., appointed Associate in Applied Mathematics and Physics, *vice* Edgar Buckingham, Ph.D., Associate Professor of Physics and Physical Chemistry, term expired.

HOLLISTER ADELBERT HAMILTON, PH.D., appointed Lecturer in Greek for one year as substitute for PROFESSOR HERBERT WEIR SMYTH during his year of absence.

ALBERT SCHINZ, PH.D., appointed Lecturer in French for one year as substitute for PROFESSOR JOSEPH AUGUSTE FONTAINE during his year of absence.

CLARENCE D. ASHLEY, LL.M., LL.D., appointed Non-resident Lecturer in Law.

ROSE CHAMBERLIN, reappointed Reader in German and French.

HARRIET RANDOLPH, PH.D., reappointed Demonstrator in Biology and Reader in Botany.

LUCY MARTIN DONNELLY, A.B., reappointed Reader in English.

HELEN WHITALL THOMAS, A.B., Reader in English, reappointed and granted leave of absence for one year.

LAURETTE EUSTIS POTTS, A.B., Reader in English, resigned.

HELEN STRONG HOYT, A.M., Reader in English, reappointed.

EDITH PETTIT, A.M., Reader in English, reappointed.

MARY DELIA HOPKINS, A.M., appointed Reader in English.

AGNES FRANCES PERKINS, A.M., appointed Reader in English.

GERTRUDE LANGDEN HERITAGE, A.M., Demonstrator in Chemistry, reappointed.

LOUISA SMITH, M.D., Director of the Gymnasium, reappointed.

JANETTE TROWBRIDGE appointed Assistant in the Gymnasium, *vice* MARY SCATTERGOOD MACOMBER, resigned.

MARY SHERWOOD, M.D., Physician of the College, resigned on account of private practice in Baltimore.

MARTHA E. OSMOND, M.D., appointed Physician of the College.

GEORGE S. GERHARD, M.D., appointed Consulting Physician of the College.

ISABEL ELY LORD, B.L.S., Librarian, reappointed.

JULIA A. HOPKINS, appointed Assistant Librarian, *vice* FLORENCE BAYARD KANE, resigned.

ISABEL MADDISON, B.Sc., PH.D., Secretary to the President and Reader in Mathematics, reappointed.

FRANCES LOWATER, Secretary of the College, resigned, and reappointed Demonstrator in Physics.

MARY HELEN RITCHIE, A.M., appointed Secretary of the College.

ELIZABETH NIELDS, A.B., Recording Secretary, reappointed.

FREDERIKA M. KERR, Bursar, reappointed.

ANNA BELL LAWTHORP, A.B., Assistant Bursar, reappointed.

ELLEN SETON OGDEN, L.B., Junior Bursar, reappointed.

MRS. REGINALD CHASE, MISS MARTHA GIBBONS THOMAS, A.B., MISS MARY HUNTER LINN, and MISS EVELYN WALKER, reappointed to the charge of Radnor Hall, Pembroke Hall East, Pembroke Hall West and Denbigh Hall, respectively; MARGARET HILL HILLES, A.B., appointed Mistress of Merion Hall, *vice* SOPHIA KIRK, resigned. MRS. ABBY I. BARLOW appointed Mistress of Dolgelley and Cartref Cottages, and Miss MARGARET BARLOW appointed Assistant to Mrs. Barlow.

## II.

### *Fellowships and Scholarships Conferred for the Year 1899-1900.*

**CORA HARDY**, . . . . . *Bryn Mawr European Fellow.*  
Birmingham, Ala. A.B., Bryn Mawr College, 1899. Holder of the James E. Rhoads Junior Scholarship, Bryn Mawr College, 1897-98, and Holder of the Anna Powers Memorial Scholarship, 1898-99.

**EDITH FRANCES CLAFLIN**, . . . . . *Mary E. Garrett European Fellow.*  
Quincy, Mass. A.B., Radcliffe College, 1897. Graduate Scholar in Greek and Latin, Bryn Mawr College, 1897-98, and Graduate Student in Greek and Latin, 1898-99.

**FLORENCE PARTHENIA LEWIS** . . . . . *President's European Fellow.*  
Fort Scott, Kansas. A.B., University of Texas, 1897, and A.M., 1898; Fellow in Philosophy, Bryn Mawr College, 1898-99.

**LIDA SHAW KING**, . . . . . *Fellow in Greek.*  
Boston, Mass. A.B., Vassar College, 1890; A.M., Brown University, 1894; Fellow in Greek, Vassar College, 1894-95; Instructor in Greek and Latin, Vassar College, 1894-97; Graduate Student in Greek and Greek History, Harvard University, 1897-98; Teacher of Latin at the Packer Institute, Brooklyn, 1898-99.

**HATTIE JOSEPHINE GRIFFIN**, . . . . . *Fellow in Latin.*  
Madison, Wis. A.B., University of Wisconsin, 1898, Alumni Fellow in Latin, University of Wisconsin, 1898-99.

**LAURETTE EUSTIS POTTS**, . . . . . *Fellow in English.*  
Philadelphia, Pa. A.B., Bryn Mawr College, 1897. Mistress of Pembroke Hall East, Bryn Mawr College, 1895-96; Sorbonne and Collège de France, 1896-97; Graduate Student in English, Bryn Mawr College, 1897-98; Reader in English, Bryn Mawr College, 1897-99.

**SOPHIE YHLEN OLSEN**, . . . . . *Fellow in Teutonic Philology.*  
Philadelphia, Pa. A.B., Bryn Mawr College, 1898, and A.M., 1899; Graduate Scholar in English and Teutonic Philology, Bryn Mawr College, 1898-99.

**ANABELLE ROXBURGH HUTCHINSON**, . . . *Fellow in Romance Languages.*  
York, England. Newnham College, University of Cambridge, 1895-99; Medieval and Modern Languages Tripos, 1898.

**RUTHELLA BERNARD MORY**, . . . . . *Fellow in History.*  
Baltimore, Md. A.B., Woman's College of Baltimore, 1897; Ph.M., University of Chicago, 1899. Student in English and History, University of Oxford, England, 1897-98; Graduate Student in History and History of Art, University of Chicago, 1898-99.

**ANNIE LYNDESAY WILKINSON**, . . . . . *Fellow in Mathematics.*  
Cleveland, Ohio. A.B., Vassar College, 1897, and A.M., 1898. Graduate Scholar in German and Mathematics, Bryn Mawr College, 1898-99.

**MARY KEYT ISHAM**, . . . . . *Fellow in Philosophy.*  
Cincinnati, Ohio. A.B., Wellesley College, 1894; A.M., University of Cincinnati, 1898. Graduate Student in Philosophy and Psychology, University of Cincinnati, 1897-98; Graduate Student in Philosophy and Psychology, University of Chicago, 1898-99.

**MARIE REIMER**, . . . . . *Fellow in Chemistry.*  
East Aurora, N. Y. A.B., Vassar College, 1897. Graduate Scholar in Chemistry, Vassar College, 1897-98; Assistant in Chemistry, Vassar College, 1898-99.

**ELIZABETH WILLIAMS TOWLE**, . . . . . *Fellow in Biology.*  
New Haven, Conn. A.B., Bryn Mawr College, 1898, and A.M., 1899. Graduate Scholar in Physics and Biology, Bryn Mawr College, 1898-99.

ANNA PALMYRA BIRDSALL,

*Graduate Scholar in English, Biblical History, and Philosophy.*  
Leptondale, N.Y. Ph.B., Earlham College, 1895.

CAROLINE BROWN BOURLAND,

*Graduate Scholar and Fellow by Courtesy in Romance Languages.*  
Peoria, Ill. A.B., Smith College, 1893. Teacher of French and German in Mrs. Starratt's School, Oak Park, Ill., 1895-96, and in the High School, Peoria, 1896-97; Student, Sorbonne and Collège de France, 1897-98; Fellow in Romance Languages Bryn Mawr College, 1898-99.

MARY BIDWELL BREED,

*Graduate Scholar and Fellow by Courtesy in Chemistry.*  
Pittsburg, Pa. Graduate, Pennsylvania College for Women, 1889; A.B., Bryn Mawr College, 1894, and A.M., 1895. Holder of the Bryn Mawr European Fellowship, Graduate Student in Chemistry, and Assistant in Chemical Laboratory, Bryn Mawr College, 1894-95; Student in Chemistry, University of Heidelberg, 1895-96; Professor of Science, Pennsylvania College for Women, 1897-99.

MAY TERRY ELMORE, . . . . . *Graduate Scholar in English.*

Elmira, N.Y. A.B., Elmira College, 1892. Teacher of English and History in the Park Place School, Elmira, 1895-98; Graduate Student in English, Bryn Mawr College, 1898-99.

FLORENCE ALDEN GRAGG, . . . . . *Graduate Scholar in Greek*

Cambridge, Mass. A.B., Radcliffe College, 1899.

WINIFRED M. KIRKLAND, . . . . . *Graduate Scholar in English*

New Berlin, N. Y. A.B., Vassar College, 1897. Teacher of English and Latin in the Misses Shipley's School, Bryn Mawr, Pa., 1897-99; Graduate Student in English, Bryn Mawr College, 1898-99.

H. ETTA MCCARROLL,

*Graduate Scholar in English, Arabic, and Biblical Literature.*  
Kirkville, Ia. Ph.B., Penn College, 1890, and A.M., 1894. Principal of the Hartland Academy, Ia., 1890-93; Teacher of Latin and English in the Haviland Academy, Kan., 1893-94; Principal of the Preparatory Department, Penn College, 1894-95 and 1897-98; Principal of the Earlham Academy, Ia., 1895-97; Graduate Scholar in English, Biblical Literature, and History, Bryn Mawr College, 1898-99.

CONTENT SHEPARD NICHOLS, . . . *Graduate Scholar in Latin and English.*

Binghamton, N. Y. A.B., Bryn Mawr College, and George W. Childs Prize Essayist, 1899.

MARY ISABEL NORTHWAY, . . . . . *Graduate Scholar in Physics.*

Toronto, Ont. A.B., University of Toronto, 1898. Ontario Normal College, 1898-99

AGNES JULIA DE SCHWEINITZ,

*Graduate Scholar in German and Teutonic Philology.*  
Bethlehem, Pa. A.B., Bryn Mawr College, 1899.

AMELIA CATHERINE SMITH, . . . . . *Graduate Scholar in Biology*

Philadelphia, Pa. S.B., University of Pennsylvania, 1899.

SARA HENRY STITES,

*Graduate Scholar in History and Political Science*  
Wyoming, Pa. A.B., Bryn Mawr College, 1899.

FLORENCE RUTH HENLEY, . . . . . *Earlham Graduate Scholar.*

Carthage, Ind. Ph.B., Earlham College, 1899.

ELIZABETH WHITE COFFIN, . . . . . *Guilford Graduate Scholar.*

Denison, Tex. A.B., Guilford College, 1899.

ROSELLA MEREDITH, . . . . . *Penn Graduate Scholar.*

Lynnville, Ia. A.B., Penn College, 1899.

- ELIZABETH BETTERTON CHANDLEE, . . . . . *Foundation Scholar.*  
Baltimore, Md. Prepared by the Bryn Mawr School, Baltimore. Foundation Scholar;  
Bryn Mawr College, 1898-99.
- SUSAN JANNEY DEWEES, . . . . . *Foundation Scholar.*  
Westtown, Pa. Prepared by the Westtown Boarding School. Foundation Scholar,  
Bryn Mawr College, 1896-99.
- MARY INDA HUSSEY, . . . . . *Foundation Scholar.*  
Richmond, Ind. Ph.B., Earlham College, 1896. Graduate Student in Biblical Literature,  
Bryn Mawr College, 1897-98, and Foundation Scholar, 1897-99.
- EMMA DUNWOODY ROBERTS, . . . . . *Foundation Scholar.*  
Bryn Mawr, Pa. Prepared by Friends' Select School, Philadelphia, Pa.
- EDITH SOPHIA WRAY, . . . . . *Foundation Scholar.*  
New York City. Prepared by the Westtown Boarding School, Westtown, Pa., and by  
Oakwood Seminary, Union Springs, N. Y. Foundation Scholar, Bryn Mawr College,  
1897-99.
- LILIAN EVERETT MOOERS,  
*First New England States Matriculation Scholar.*  
Lawrence, Mass. Prepared by Abbot Academy, Andover, Mass.
- ELIZA INGERSOLL BOWDITCH,  
*Second New England States Matriculation Scholar.*  
Jamaica Plain, Mass. Prepared by Miss Mary P. Winsor's School, Boston, Mass.
- MARTHA ROOT WHITE,  
*First New York and New Jersey Matriculation Scholar.*  
New York City. Prepared by Miss Spence's School, New York City.
- EMMA DANFORTH BUSH,  
*Second New York and New Jersey Matriculation Scholar.*  
Wilmington, Del. Prepared by the Misses Hebb's School, Wilmington.
- ELEANOR LOUIE FLEISHER,  
*First Pennsylvania and Southern States Matriculation Scholar.*  
Philadelphia, Pa. Prepared by the Misses Hayward's School, Philadelphia.
- THERESE PAULINE COLES,  
*Second Pennsylvania and Southern States Matriculation Scholar.*  
Philadelphia, Pa. Prepared by Miss Irwin's School, Philadelphia.
- AGATHA LAUGHLIN, . . . . *Second Western States Matriculation Scholar.*  
Chicago, Ill. Prepared by Ascham Hall, Chicago.
- LOTTA GRACE ANDREWS,  
*Trustees' Philadelphia Girls' High School Scholar.*  
Philadelphia, Pa. Prepared by the Girls' High School, Philadelphia. Holder of Trustees'  
Philadelphia Girls' High School Scholarship, 1898-99. Student in Preliminary Medical Course.
- MARGARET E. BRUSSTAR,  
*Trustees' Philadelphia Girls' High School Scholar.*  
Birdsboro, Pa. Prepared by the Girls' High School, Philadelphia.
- JULIA C. DOWNING, . . *Trustees' Philadelphia Girls' High School Scholar.*  
Philadelphia, Pa. Prepared by the Girls' High School, Philadelphia.
- MARY ELIZABETH MASLAND,  
*Trustees' Philadelphia Girls' High School Scholar.*  
Philadelphia, Pa. Prepared by the Girls' High School, Philadelphia. Holder of Trustees'  
Philadelphia Girls' High School Scholarship, 1897-99.
- EMMA LOUISE MILLER, . *Trustees' Philadelphia Girls' High School Scholar.*  
Philadelphia, Pa. Prepared by the Girls' High School, Philadelphia. Holder of Trustees'  
Philadelphia Girls' High School Scholarship, 1897-99.

- HELEN BELL TRIMBLE, . *Trustees' Philadelphia Girls' High School Scholar*.  
Philadelphia, Pa. Prepared by the Girls' High School, Philadelphia. Holder of Trustees' Philadelphia Girls' High School Scholarship, 1898-99.
- LULU JOHNSON WHITE, . *Trustees' Philadelphia Girls' High School Scholar*.  
Philadelphia, Pa. Prepared by the Girls' High School, Philadelphia.
- ELIZABETH SNYDER, . . . . *Trustees' Lower Merion High School Scholar*.  
Ardmore, Pa. Prepared by the Lower Merion High School, Ardmore.
- LAURA FOWLER, . . . . . *James E. Rhoads Junior Scholar*.  
Clarksburg, W. Va. Prepared by the Bryn Mawr School, Baltimore, Md. Holder of Special Baltimore Matriculation Scholarship, 1897-98.
- JEANNIE COLSTON HOWARD, . . *James E. Rhoads Special Junior Scholar*.  
Baltimore, Md. Prepared by St. Timothy's School, Catonsville, Md. Holder of Second Bryn Mawr Matriculation Scholarship for the Middle and Southern States, 1897-98; Holder of the James E. Rhoads Sophomore Scholarship, 1898-99.
- ELEANOR JAMES, . . . . . *James E. Rhoads Sophomore Scholar*.  
Philadelphia, Pa. Prepared by Miss Gordon's School, Philadelphia.
- JOHANNA KROEBER, . . . . . *Anna Powers Memorial Scholar*.  
New York City. Prepared by Dr. J. Sachs's School for Girls, New York City. Holder of First Bryn Mawr Matriculation Scholarship for New York and New Jersey, 1896-97.
- LEONORA WALTON GIBB, . . . . . *New Century Club Scholar*.  
Philadelphia, Pa. Prepared by the Girls' High School, Philadelphia. Holder of New Century Club Scholarship, 1897-99.
- ELLEN DEBORAH ELLIS, . *Girls' High and Normal School Alumnae Scholar*.  
Philadelphia, Pa. Prepared by the Girls' High School, Philadelphia. Holder of First Bryn Mawr Matriculation Scholarship for the Middle and Southern States, 1897-98; Holder of Philadelphia Girls' High and Normal School Alumnae Scholarship, 1897-99.
- CLARISSA ISABEL CRANE, . . . . . *Bryn Mawr School Scholar*.  
Baltimore, Md. Prepared by the Bryn Mawr School, Baltimore. Holder of Bryn Mawr School Scholarship, 1898-99.
- EDITH CAMPBELL CRANE, . . . . . *Bryn Mawr School Scholar*.  
Baltimore, Md. Prepared by the Bryn Mawr School, Baltimore. Holder of Bryn Mawr School Scholarship, 1896-99.
- LUCIA DAVIS, . . . . . *Bryn Mawr School Scholar*.  
Warren, Md. Prepared by the Bryn Mawr School, Baltimore, Md. Holder of Bryn Mawr School Scholarship, 1898-99.
- MARION MARGARET HICKMAN, . . . . . *Bryn Mawr School Scholar*.  
Baltimore, Md. Prepared by the Bryn Mawr School, Baltimore. Holder of Bryn Mawr School Scholarship, 1896-99.
- MARY GRACE KILPATRICK, . . . . . *Bryn Mawr School Scholar*.  
Baltimore, Md. Prepared by the Bryn Mawr School, Baltimore. Holder of Bryn Mawr School Scholarship, 1896-99.
- ELIZABETH CHRISTINA REINHARDT, . . . . *City Scholar, Ordinance 1898*.  
Philadelphia, Pa. Prepared by the Girls' High School, Philadelphia. Holder of City Scholarship, Ordinance 1898, 1898-99.
- MABEL CLARA WRIGHT, . . . . . *City Scholar, Ordinance 1898*.  
Philadelphia, Pa. Prepared by the Girls' High School, Philadelphia. Holder of City Scholarship, Ordinance 1898, 1898-99.
- MARY CREIGHTON BURNS, . . . . . *City Scholar, Ordinance 1899*.  
Philadelphia, Pa. Prepared by the Girls' High School, Philadelphia.
- HELEN SYDNEY DITMARS, . . . . . *City Scholar, Ordinance, 1899*.  
Philadelphia, Pa. Prepared by the Girls' High School, Philadelphia.
- HARRIET ADELE DOWNING, . . . . . *City Scholar, Ordinance, 1899*.  
Philadelphia, Pa. Prepared by the Girls' High School, Philadelphia.

- LYNDA MYRA HARBESON, . . . . . *City Scholar, Ordinance, 1899.*  
Philadelphia, Pa. Prepared by the Girls' High School, Philadelphia.
- LILLIE ELIZABETH MÜLLER, . . . . . *City Scholar, Ordinance, 1899.*  
Philadelphia, Pa. Prepared by the Girls' High School, Philadelphia.
- ALICE MONTELIUS PRICE, . . . . . *City Scholar, Ordinance, 1899.*  
Philadelphia, Pa. Prepared by the Girls' High School, Philadelphia.
- EDITH ELLEN SYKES, . . . . . *City Scholar, Ordinance, 1899.*  
Philadelphia, Pa. Prepared by the Girls' High School, Philadelphia.
- ELSIE CECIL THOMAS, . . . . . *City Scholar, Ordinance, 1899.*  
Philadelphia, Pa. Prepared by the Girls' High School, Philadelphia.
- FRANCES CHARLOTTE WAYNE, . . . . . *City Scholar, Ordinance, 1899.*  
Philadelphia, Pa. Prepared by the Girls' High School, Philadelphia.
- CATHARINE VICTORIA WILSON, . . . . . *City Scholar, Ordinance, 1899.*  
Philadelphia, Pa. Prepared by the Girls' High School, Philadelphia.
- HANNAH TERESA ROWLEY, . . . . . *Simon Muhr Scholar.\**  
Philadelphia, Pa. Prepared by the Girls' High School, Philadelphia. Holder of  
Simon Muhr Scholarship, 1897-99.
- CORINNE SICKEL, . . . . . *Simon Muhr Scholar.\**  
Philadelphia, Pa. Prepared by the Girls' High School, by the Girls' Normal School,  
and by Miss Case and Miss Hallowell's School, Philadelphia. Holder of Simon  
Muhr Scholarship, 1897-99.
- FLORENCE PEEBLES, . . . . . *Woods Holl Scholar.*  
Lutherville, Md. A.B., the Woman's College of Baltimore, 1895. Graduate Scholar in  
Biology, Bryn Mawr College, 1895-96, Fellow in Biology, 1896-97; Graduate Student  
in Biology, 1897-98; Occupying Bryn Mawr College Investigator's Room, Woods  
Holl Laboratory, Summer of 1898. Holder of the Mary E. Garrett European Fellow-  
ship and Student in Biology, Zoological Station, Naples, University of Munich,  
University of Halle, 1898-99.
- HELEN DEAN KING, . . . . . *Woods Holl Scholar.*  
Owego, N. Y. A.B., Vassar College, 1892. Graduate Student in Biology, Vassar  
College, and Assistant in the Biological Laboratory, 1894-95; Graduate Scholar in  
Biology, Bryn Mawr College, 1895-96 and Graduate Student in Biology, 1896-97;  
Fellow in Biology, Bryn Mawr College, 1897-98; Occupying Bryn Mawr College  
Investigator's Room, Woods Holl Laboratory, Summer of 1898; Fellow by Courtesy  
in Biology, 1898-99.
- JOHANNA KROEBER, . . . . . *Woods Holl Scholar.*  
New York City. Prepared by Dr. J. Sachs's School for Girls, New York City. Holder  
of First Bryn Mawr Matriculation Scholarship for New York and New Jersey, 1896-  
97. Occupying table in Woods Holl Laboratory, Summer of 1898. Bryn Mawr  
College, 1896-99.
- CONTENT SHEPARD NICHOLS, . . . . . *George W. Childs Prize Essayist.*  
Binghamton, N. Y. Prepared by the Binghamton High School, Bryn Mawr College,  
1895-99. A.B., Bryn Mawr College, 1899.

---

\* These scholarships are awarded by the Board of Directors of City Trusts, Philadelphia, the successful candidates themselves choosing the institution of learning in which the scholarship shall be held.

### III.

#### *Degrees Conferred during the Academic Year 1898-99.*

##### DOCTORS OF PHILOSOPHY.

###### HELEN DEAN KING, of New York.

A.B., Vassar College, 1892. Graduate Student in Biology, Vassar College, and Assistant in the Biological Laboratory, 1894-95; Graduate Scholar in Biology, Bryn Mawr College, 1895-96, and Graduate Student in Biology, 1896-97; Fellow in Biology, Bryn Mawr College, 1897-98, and Fellow by Courtesy in Biology, 1898-99. Subjects: Morphology, Palæontology, and Physiology. Thesis: The Maturation and Fertilization of the egg of *Bufo Lentiginosus*.

###### EMILIE NORTON MARTIN, of Pennsylvania.

A.B., Bryn Mawr College, 1894. Graduate Student in Mathematics and Physics, Bryn Mawr College, First Semester, 1894-95, and 1896-97; Fellow in Mathematics, Bryn Mawr College, 1895-96; Holder of the Mary E. Garrett European Fellowship, and Student in Mathematics, University of Göttingen, 1897-98; Fellow by Courtesy in Mathematics, Bryn Mawr College, 1898-99. Subjects: Mathematics and Physics. Thesis: Determination of the Non-primitive Substitution Groups of Degree Fifteen and of the Primitive Substitution Groups of Degree Eighteen.

###### MARY HELEN RITCHIE, of Philadelphia.

A.B., Bryn Mawr College, 1896, and A.M., 1897. Graduate Scholar in Greek and Latin, Bryn Mawr College, 1896-97, and Graduate Student in Greek and Latin, 1897-98; Fellow in Latin, Bryn Mawr College, 1898-99. Subjects: Latin and Greek. Thesis: A Study of Conditional and Temporal Clauses in Pliny the Younger.

##### MASTERS OF ARTS.

###### ABIGAIL CAMP DIMON, of New York.

A.B., Bryn Mawr College, 1896. Graduate Student in Mathematics, Chemistry, and Biology, Bryn Mawr College, 1898-99.

###### GERTRUDE LANGDEN HERITAGE, of Bryn Mawr.

A.B., Bryn Mawr College, 1896. Graduate Student in Mathematics and Chemistry, Bryn Mawr College, 1897-98, and Graduate Student in Chemistry, 1896-97 and 1898-99; Demonstrator in Chemistry, Bryn Mawr College, 1896-99.

###### GRACE PERLEY LOCKE, of Maine.

A.B., Bryn Mawr College, 1898. Graduate Student in English and Philosophy, Bryn Mawr College, 1898-99.

###### SOPHIE YHLEN OLSEN, of Philadelphia.

A.B., Bryn Mawr College, 1898. Graduate Scholar in English and Teutonic Philology, Bryn Mawr College, 1898-99.

###### MARION EDWARDS PARK, of New York.

A.B., Bryn Mawr College, 1898. Holder of the Bryn Mawr European Fellowship, and Graduate Student in Greek and English, Bryn Mawr College, 1898-99.

###### AGNES FRANCES PERKINS, of New York City.

A.B., Bryn Mawr College, and George W. Childs Prize Essayist, 1898. Graduate Student in English, Bryn Mawr College, 1898-99.

###### ELIZABETH WILLIAMS TOWLE, of New Haven.

A.B., Bryn Mawr College, 1898. Graduate Scholar in Physics and Biology, Bryn Mawr College, 1898-99.

##### BACHELORS OF ARTS.

###### ANNA DELANY FRY, of Philadelphia.

Prepared by the Friends' Central School, Philadelphia. Group: Chemistry and Biology. The work for this degree was completed in February, 1899.



- LUCILE MERRIMAN**, of Pennsylvania.  
Prepared by the Bishopthorpe School, South Bethlehem. Group: Chemistry and Biology. The work for this degree was completed in February, 1899.
- ELIZABETH AGNES ANDREWS**, of Boston.  
Prepared by the Girls' Latin School, Boston, and by Miss Irwin's School, Philadelphia, Pa. Group: History and Political Science.
- ELIZABETH GRAEME BARBOUR**, of Kentucky.  
Central University of Kentucky, 1880-88. Principal of Private School, Richmond, Ky., 1889-93; Teacher of Latin, English and German in the York Collegiate Institute, York, Pa., 1896-97; Teacher in Collegiate School, New York City, 1897-98. Group: Latin and English.
- ANNA MOORE BEDINGER**, of Kentucky.  
Prepared by the Bellewood Seminary, Anchorage, Ky., and by Miss Florence Baldwin's School, Bryn Mawr, Pa. Group: Physics and Chemistry.
- BESSIE GERTRUDE BISSELL**, of Iowa.  
Prepared by the High School, Dubuque, Ia., and by the Misses Shipley's School, Bryn Mawr, Pa. Group: History and Political Science.
- ANNE FLEMING BLAUVELT**, of New Jersey.  
Prepared by the Misses Anable's School, New Brunswick, N. J., and by Miss Florence Baldwin's School, Bryn Mawr, Pa. Group: History and Political Science.
- ANNIE AYER BOYER**, of Pennsylvania.  
Prepared by the Pottsville High School, and by Miss Florence Baldwin's School, Bryn Mawr, Pa. Group: Chemistry and Biology.
- MARY NICHOLSON BROWNE**, of Baltimore.  
Prepared by the Bryn Mawr School, Baltimore. Holder of Bryn Mawr School Scholarship, 1895-99. Group: History and Political Science.
- ALICE CARTER**, of Philadelphia.  
Prepared by Miss Spence's School, New York City, and by private study. Group: History and Political Science.
- EDITH BURWELL CHAPIN**, of Pennsylvania.  
Prepared by Miss Florence Baldwin's School, Bryn Mawr, Pa. Group: History and Political Science.
- BERTHA POOLE CHASE**, of Massachusetts.  
Prepared by the High School, Lynn, Mass. Group: Greek and Latin.
- ETTA LINCOLN DAVIS**, of Massachusetts.  
Prepared by the Cambridge Latin School, Cambridge, Mass. Group: Philosophy and Mathematics.
- ELINOR MARGARET DEARMOND**, of Ohio.  
Prepared by Miss Florence Baldwin's School, Bryn Mawr, Pa. Group: Latin, Italian and Spanish.
- MARY TAYLOR REEVES FOULKE**, of Indiana.  
Prepared by private study. Group: Chemistry and Biology.
- MARY DOROTHY FRONHEISER**, of Pennsylvania.  
Prepared by the Cheltenham Hills School, Cheltenham Hills, Pa., and by Miss Florence Baldwin's School, Bryn Mawr, Pa. Group: History and Political Science.
- MARY EMMA GUFFEY**, of Pennsylvania.  
Prepared by the Alinda Preparatory School, Pittsburgh, Pa. Group: History and Political Science.
- DOROTHY ANNA HAHN**, of Pennsylvania.  
Prepared by the Girls' High School, Philadelphia, Pa., and by Miss Florence Baldwin's School, Bryn Mawr, Pa. Group: Chemistry and Biology.
- MARGARET HALL**, of Boston.  
Prepared by the Misses Lane and Baker's School, Brookline, Mass. Group: History and Political Science.

**CORA HARDY, of Alabama.**

Prepared by the Pollock-Stevens Institute, Birmingham, Ala., by Prof. J. C. DuBose, and by Miss Florence Baldwin's School, Bryn Mawr, Pa. Holder of James E. Rhoads Junior Scholarship, 1897-98. Holder of Anna Powers Memorial Scholarship, 1898-99. Group: Latin and French.

**FRIEDRIKA MARGRETHA HEYL, of New York.**

Prepared by the High School, Dunkirk, N. Y., and by Miss Florence Baldwin's School, Bryn Mawr, Pa. Group: English and German.

**ETHEL EUGENIE HOOPER, of Chicago.**

Prepared by the Kirkland School, Chicago. Group: History and Political Science.

**SIBYL EMMA HUBBARD, of New York City.**

Prepared by the Brearley School, New York City. Group: History and Political Science.

**FRANCES ANNE KEAY, of Pennsylvania.**

Prepared by Miss Case and Miss Hallowell's School, Philadelphia, Pa. Group: History and Political Science.

**ETHEL LEVERING, of Baltimore.**

Prepared by the Bryn Mawr School, Baltimore. Holder of Bryn Mawr School Scholarship, 1895-99. Group: History and Political Science.

**LILLIE DEMING LOSHE, of Connecticut.**

Prepared by Miss Low's School, Stamford, Conn. Group: History and Political Science.

**MICHI MATSUDA, of Japan.**

Prepared by Miss Mary F. Stevens's School, Germantown, Philadelphia, Pa. Group: History and Political Science.

**CHARLOTTE FRELINGHUYSEN McLEAN, of Philadelphia.**

Prepared by the Friends' Central School, Philadelphia, by Miss Sandford's School, Philadelphia, and by Prof. R. H. Chase. Group: Chemistry and Biology.

**ADDIS MANSON MEADE, of Virginia.**

Prepared by private study. Group: Chemistry and Biology.

**CHARLOTTE BARNARD MITCHELL, of Philadelphia.**

Oberlin College, 1892-94. Group: Chemistry and Biology.

**JANE ROSALIE MORICE, of Pennsylvania.**

Prepared by Miss Florence Baldwin's School, Bryn Mawr, Pa. Group: Latin and French.

**CONTENT SHEPARD NICHOLS, of New York.**

Prepared by the High School, Binghamton, N. Y. Group: Latin and French.

**CHRISTINE ORRICK, of St. Louis.**

Smith College, 1891-93. Group: Latin and French.

**MADELINE PALMER, of Pennsylvania.**

Prepared by Miss Florence Baldwin's School, Bryn Mawr, Pa. Group: History and Political Science.

**LAURA PECKHAM, of New Jersey.**

Prepared by the Misses Vail and Deane's School, Elizabeth, N. J., and by the Plainfield Seminary, Plainfield, N. J. Group: History and Political Science.

**MARION BUCKINGHAM REAM, of Chicago.**

Prepared by the Holman-Dickerman School, Chicago, and by Miss Florence Baldwin's School, Bryn Mawr, Pa. Group: German and French.

**MAY CADETTE SCHONEMAN, of New York City.**

Prepared by the Harlem Collegiate Institute, New York City, and by Mr. M. G. Grovanoly. Group: History and Political Science.

**AGNES JULIA DE SCHWEINITZ, of Pennsylvania.**

Prepared by the Moravian Day School, Bethlehem, Pa. Group: German and French.

**DOLLIE HOLLAND SIPE**, of Washington.

Prepared by the High School, Washington, D. C. Group: Greek and Latin.

**AMY LOUISE STEINER**, of Baltimore.

Prepared by the Bryn Mawr School, Baltimore, Md. Group: History and Political Science.

**SARA HENRY STITES**, of Pennsylvania.

Prepared by the Wilkes Barre Female Institute, Wilkes Barre, Pa. Group: History and Political Science.

**MARY TYLER THURBER**, of Massachusetts.

Prepared by Mr. and Mrs. John McDuffie's School, Springfield, Mass., and by private study. Group: Latin and German.

**MARY RUTTER TOWLE**, of Massachusetts.

Prepared by the High School, Wakefield, Mass., and by Miss Brown and Miss Owens School, Boston, Mass. Group: Political Science and Philosophy.

#### IV.

##### *Addresses and Concerts given during the Year 1898-99.*

###### *Before the College:*

DR. WILLIAM CUNNINGHAM, "The Origin of Old English Towns and Their Institutions."

MR. JAMES WOOD, "Our Flag and What It Stands For."

DR. ALBERT HAAS, "M. Rod as Critic and Novelist."

M. EDOUARD ROD, three lectures on "Contemporary French Dramatic Poetry. *Cyrano de Bergerac*;" "Personal Literature in France;" and "The French Novel."

THE REV. GEORGE P. FISHER, D.D., LL.D. "The Doctrines of the Quakers in Relation to Prior and to Present-day Theology." (Founder's Lecture.)

###### *Before the Graduate Club:*

MR. GEORGE BREED ZUG, "The Higher Renaissance."

MR. ISRAEL ZANGWILL, "Fiction, The Highest Form of Truth."

DR. NICHOLAS MURRAY BUTLER, "Education."

PROFESSOR ROLLIN D. SALISBURY, "Northern Greenland."

DR. JAMES H. LEUBA, "Thought Transference and Slate Writing."

###### *Before the Philosophical Club:*

DR. CHARLES MONTAGUE BAKEWELL, "The Philosophy of Nietzsche."

MR. HENRY D. SEDGWICK, JR., "The Function of Literature."

PROFESSOR HARRY NORMAN GARDINER, "Some Aspects of Personality."

MR. WILLIAM M. SALTER, "Walt Whitman."

PROFESSOR JOSIAH ROYCE, "Immortality."

###### *Before the Geological Department and the Students of the Other Scientific Departments:*

PROFESSOR ROLLIN D. SALISBURY, "The Yellowstone National Park."

###### *Before the De Rebus Club:*

MISS UMÉ TSUDA, an informal talk on "Woman's Education in Japan."

MR. JOHN W. MARTIN, "Liberty, Equality and Fraternity, New Style."

MR. DAVID WILLARD, "Teaching of the Boy Prisoners in the Tombs."

MR. W. H. TOLMAN, "Studies in Social and Industrial Betterment."

MR. E. LAWRENCE HUNT, "The George Jr. Republic."

DR. CHARLES McLEAN ANDREWS, "The Question of the Philippines."

*Before the De Rebus Club (Continued):*

MR. JOSEPH EARLE STEVENS, "The Phillippines."

MRS. CHARLOTTE PERKINS STETSON, "Our Brains and What Ails Them."

MR. HORACE WHITE, "Single Tax."

*Before the College Settlement Association:*

MISS HELENA DUDLEY, "How to Meet the Needs of a Working-Class District."

DR. WILLIAM ALLAN NEILSON, "Settlements."

*Before the Christian Union Association:*

MR. JOHN R. MOTT, an informal address on the work of the World's Students' Federation.

MISS SANFORD, "What after College."

THE REV. FATHER HUNTINGTON, an informal address.

*Before the Missionary Society of the Christian Union Association:*

DR. PAULINE ROOT, an informal address.

*Under the Auspices of the Music Committee:*

THE KNEISEL QUARTETTE, two concerts.

MISS MARIE DONAVIN, MRS. MARSHALL PEASE, MR. MACKENZIE GORDON and MR. GWYLM MILES, "In a Persian Garden."

MR. DAVID BISPHAM, Song Recital.

MISS ADELE AUS DER OHE, Piano Recital.

V.

*College Preachers during the Year 1898-99.*

PROFESSOR GEORGE A. BARTON, PH.D., Bryn Mawr College.

THE REV. ELWOOD WORCESTER, PH.D., Rector of St. Stephen's Church, Philadelphia.

THE REV. ALEXANDER MCKENZIE, A.M., D.D., Secretary of the Board of Overseers of Harvard University.

THE REV. E. WINCHESTER DONALD, D.D., Rector of Trinity Church, Boston.

THE REV. ROBERT E. SPEER, D.D., Secretary of the Board of Foreign Missions of the Presbyterian Church.

THE REV. WILLIAM H. P. FAUNCE, D.D., Pastor of the Fifth Avenue Baptist Church of New York City.

THE REV. MALTBIE D. BABCOCK, D.D., Pastor of the Brown Memorial Presbyterian Church, Baltimore.

THE REV. JOSEPH N. BLANCHARD, D.D., Rector of St. James' Church, Philadelphia.

MRS. BALLINGTON BOOTH of the Volunteers of America.

THE REV. GEORGE A. GORDON, D.D., Minister of the Old South Church, Boston.

## VI.

### *Gifts received by the College during the Year 1898-99.*

Our sincere gratitude is due for the following gifts which have been received during the past year, in addition to gifts of special books to the library which are enumerated and acknowledged in the report of the Librarian:

From the Class of 1899, \$96, to be expended in the purchase of books on music.

From the Bryn Mawr School, for Bryn Mawr School Scholarships, \$3,600.

From Miss Ethel Powers, for the Anna Powers Memorial Scholarship, \$100.

From the Philadelphia Girls' High and Normal School Alumnae Association, for the Alumnae Scholarship, \$100.

From the New Century Club for a Scholarship, \$100.

From Mr. John B. Garrett, \$100 contributed toward a graduate scholarship in Biblical Literature.

From Friends of the College, \$125 contributed for the above scholarship through Professor George A. Barton.

From the Hon. Mrs. Bertrand Russell, \$50 for lecture delivered at the College.

From the General Society of the Daughters of the American Revolution, through its Committee on Patriotic Work, \$20 to be offered as a prize for an essay to be written by a member of the Junior Class of Bryn Mawr College.

From the Misses Talcott, of Bangor, Maine, through Professor C. J. H. Ropes, of Bangor Theological Seminary, *The Missionary Herald* from 1813 to 1899 (86 volumes, one-half bound and one-half unbound).

From Miss Mary E. Garrett, for \$1,445 to be expended as follows: \$450 for equipment of laboratory of physiological psychology; \$340 for additional microscopes in biological laboratory; \$250 for lathe for physical laboratory; \$150 for books in economics; \$150 for books on art and photographs; \$105 for books on archæology and photographs.

Gifts of money, amounting in all to about \$1,500, were received from friends who requested that their names should not be mentioned, for the following objects: Subscriptions to the American Classical School at Athens, American Classical School at Rome, Investigator's Room at Woods Holl Marine Laboratory, Student's Table at Woods Holl Marine Laboratory, American Women's Table at Naples, Travelling expenses of the Academic Committee of the Alumnæ Association, Graduate Handbook, Graduate Caps and Gowns, Luncheon to the Association of Collegiate Alumnæ, Public Lectures, and other objects.



## VII.

### *Titles of Scientific Publications of the Faculty which appeared in the Year 1898-99.*

Dr. Charles McLean Andrews,

"American Colonial History—1690-1790." *Annual Report of American Historical Association*, 1898.

Review of Maitland's "Township and Borough." *Political Science Quarterly*, December, 1898.

Review of Stern's "Geschichte Europas," Vol. II. *American Historical Review*, October, 1898.

Review of Forbes's "Napoleon III." *American Historical Review*, January, 1899.

Review of Adams's "Sparks and de Tocqueville." *Annals of the American Academy*, May, 1899.

Review of Des Marez's "Etudes de propriété foncière en Gand." *Political Science Quarterly*, June, 1899.

Dr. George A. Barton,

"The Composition of the Book of Daniel." *Journal of Biblical Literature*. Vol. XVII.

"The Apocalypse and Recent Criticism." *American Journal of Theology*, October, 1898.

"The Spiritual Development of Paul." *The New World*, March, 1899.

"The New Covenant." *The American Friend*, Vol. V., No. 42.

Review of Terry's "Apocalypics." *American Journal of Theology*, January, 1899.

Review of article on "Revelation" in Hastings's *Dictionary of the Bible*. *American Journal of Theology*, July, 1899.

Review of Jastrow's "Religion of Babylonia and Assyria." *Journal of Semitic Languages*, July, 1899.

Dr. Florence Bascom,

Review of "Maryland Geological Survey," Vol. I. *American Geologist*, December, 1898.

Review of "Maryland Geological Survey," Vol. II. *American Geologist*, March, 1899.

"On some Dykes in the Vicinity of Johns Bay, Maine." *American Geologist*, May, 1899.

Miss Rose Chamberlin,

"Advanced Sight Translation, being selections for practice in German reading." Heath and Company, Boston, 1898.

"Scheme of German Nouns, arranged in convenient form for study." Published privately.

"Scheme of German Verbs, arranged in convenient form for study." Published privately.

Dr. Hermann Collitz,

"Sammlung der griechischen Dialektinschriften," Band II, Heft 6: "Die delphischen Inschriften." Joh. Baunack, Göttingen, 1898-99.

"The etymology of Vedic *návedas*." A paper read before the American Oriental Society, April, 1899.

Dr. Wilmer Cave France,

Thirty reviews of books (chiefly classical) in *The Nation* and *Literature*.

Dr. Albert Haas,

"Der Egoismus in der Geschichte." *Der Egoismus*, Berlin, 1899.

Review of Kuno Francke's "Glimpses of Modern German Culture." *International Journal of Ethics*, Vol. IX., No. 3.

Mr. James Harkness,

"An Introduction to the Theory of Analytic Functions." By J. Harkness and F. Morley. The Macmillan Company, New York. 1899.

Dr. John Homer Huddilston,

"Classical Archæology—a new force in classical studies." *Book Reviews*, October, 1898.

"Key" to Huddilston's "Essentials of New Testament Greek." The Macmillan Company, 1899.

"An Archæological Study of the *Antigone* of Euripides." *American Journal of Archæology*, 1899, No. III.

Dr. Lindley Miller Keasbey,

"The Political Relations of the United States to the Far East." Address before the Annual Meeting of the American Academy of Political and Social Science, April 7th, 1899. Printed in Supplement to the *Annals of the American Academy of Political and Social Science*, May, 1899.

Dr. Edward H. Keiser,

"New Experiments on the Quantitative Synthesis of Water." *American Chemical Journal*, September, 1898.

"On a Liquid Acetylene Diiodide." *American Chemical Journal*, February, 1899.

Dr. James H. Leuba,

"The Psycho-physiology of the Moral Imperative." *American Journal of Psychology*, Vol. VIII.

"Intellectual fatigue and the Griesbach Method." *Psychological Review*, November, 1899.

Dr. Arthur S. Mackenzie.

"On the Claims of Abstract Science to a Place in the Franklin Institute." *Journal of the Franklin Institute*, August, 1899.

"The Laws of Gravitation." Harper & Brothers, New York, 1899. Being volume IX. of Harper's Scientific Memoirs.

Dr. Isabel Maddison,

"Handbook of British, Continental, and Canadian Universities with special mention of the Courses open to Women." Second edition. Pp. iv, 174. The Macmillan Company, New York. 1899.

Dr. Thomas Hunt Morgan.

"Some Problems of Regeneration." *Biological Lectures*. 1898.

"The Action of Salt-Solutions on the Unfertilized and Fertilized Eggs of Arbacia and of Other Animals," Vol. VII. 1899.

"A Confirmation of Spallanzani's Discovery of an Earthworm Regenerating a Tail in Place of a Head." *Anatomischer Anzeiger*, Vol. XV. 1899.

Review of Davenport's "Experimental Morphology." *Science*. 1899.

"Regeneration of Tissue composed of parts of two species." *Biological Bulletin*. 1899.

"Further Experiments on the Regeneration of the Hermit Crab." *Anatomische Anzeiger*, Vol. XV. 1899.

Dr. William Allan Neilson,

"The original of 'The Complaynt of Scotlande.'" *Journal of Germanic Philology*, Vol. I., pp. 411-430.

Revised edition of "Selections from the Poems of Robert Burns, edited, with Introduction, Notes, and a Vocabulary, by the late John E. Dow." Athenæum Press Series, pp. xcvi, 286. Ginn & Co., Boston, 1898.

Review of A. F. Henderson's "History of Scottish Vernacular Literature." *The Nation*, March 30, 1899.

Dr. Charlotte Angas Scott,

Review of Reye's "Geometrie der Lage" (Holgate's translation). *Bulletin of the American Mathematical Society*.

Dr. Herbert Weir Smyth,

"Mute and Liquid in Bacchylides." *Transactions of the American Philological Association*, Vol. 29.

## VIII.

*Tabular Statement of the Courses of Instruction given in 1898-99.*

DEPARTMENT	COURSE	INSTRUCTOR	Hours Weekly	NO. IN CLASS	
				1st Sem.	2nd Sem.
SANSKRIT GREEK	<i>Graduate Classes</i>				
	Sanskrit, advanced .....	Dr. Collitz	. 2..	. 1..	. 1..
	Elementary Greek, Grammar, Com- position, and Reading.....	Dr. France	. 5..	. 2..	. 3..
	Homer, minor .....	"	. 2..	. 16..	. 15..
	Plato, minor .....	Dr. Smyth	. 2..	. 19..	.....
	Euripides, minor .....	"	. 2..	.....	. 19..
	Greek Prose Composition, minor....	Dr. France	. 1..	. 17..	. 19..
	Lectures on the History of Greek Literature, major .....	"	. 2..	. 11..	. 11..
	Sophocles, major .....	Dr. Smyth	. 2..	. 12..	.....
	Elegiac Poets, major .....	"	. 1..	. 12..	.....
	Herodotus, major .....	"	. 2..	.....	. 12..
	Melic Poets, major .....	"	. 1..	.....	. 12..
	Æschylus, post-major .....	"	. 3..	. 8..	.....
	Theocritus, post-major .....	"	. 3..	.....	. 8..
	Plato, post-major ..	Dr. France	. 2..	. 2..	. 2..
	New Testament Greek, post-major..	Dr. Barton	. 2..	. 2..	. 2..
	<i>Graduate Classes</i>				
	Thucydides.....	Dr. Smyth	. 4..	. 5..	. 5..
LATIN	Horace, minor .....	Dr. Laing	. 2..	. 47..	. 43..
	Livy, minor .....	Dr. Lodge	. 2..	. 44..	.....
	Cicero, minor .....	"	. 2..	.....	. 44..
	Latin Prose Composition, minor....	"	. 1..	. 45..	. 47..
	Lectures on the History of Latin Literature, major.....	Dr. Laing	. 2..	. 28..	. 29..
	Tacitus, major .....	Dr. Lodge	. 3..	. 28..	.....
	Horace, Juvenal, Tibullus, Proper- tius, major .....	"	. 3..	.....	. 29..
	Terence, post-major .....	"	. 2..	. 9 ..	.....
	Plautus, post-major .....	"	. 2..	.....	. 8..
	Martial, Petronius, and Apuleius, post-major .....	Dr. Laing	. 3..	. 8..	.....
	Lucretius and Catullus, post-major..	"	. 3..	.....	. 9..
	Seneca, post-major .....	"	. 2..	. 3..	.....
	Ovid, post-major .....	"	. 2..	.....	. 6..
	Latin Prose Composition, post-major	"	. 1..	. 3..	. 2..
	<i>Graduate Classes</i>				
	Roman Historiography.....	Dr. Lodge	. 3..	. 6..	. 6..
	Latin Syntax .....	"	. 1..	. 6..	. 6..
ENGLISH	Lectures on the History of English Literature, from the time of Shake- speare to the Restoration inclusive, required .....	Dr. Neilson	. 3..	. 177..	.....
	Lectures on the History of English Literature from the Restoration to the present time, required.....	Dr. Gwinn,	. 3..	.....	. 187..
	Essay Work, required, first year....	H. W. Thomas			
		L. E. Potts, H. S. Hoyt and E. Pettit	. 2..	. 76..	. 74..

*Tabular Statement of the Courses of Instruction given in 1898-99  
continued.*

DEPARTMENT	COURSE	INSTRUCTOR	Hours Weekly	No. IN CLAS	
				1st Sem.	2d Sem.
	Essay Work, required, second year..	Dr. Gwinn, H. W. Thomas, L. E. Potts, E. Pettit	2..	68..	66
	Anglo-Saxon Grammar and Beowulf, minor .....	Dr. Bruce	2..	3..	3
	Chaucer, minor .....	"	3..	1..	....
	Shakespeare, minor .....	"	3..	.....	3
	English Critics of the Nineteenth Century, major .....	Dr. Gwinn	3..	23..	24
	English Poets of the Nineteenth Century, major .....	Dr. Neilson	2..	29..	28
	Descriptive Writing .....	H. W. Thomas	2..	13..	9
	<i>Graduate Classes</i>				
	Seventeenth Century Prose Writers	Dr. Gwinn	3..	8..	6
	English Drama.....	Dr. Neilson	3..	12..	13
	English and Scottish Ballads .....	"	2..	14..	11
	English Historical Grammar.....	Dr. Bruce	2..	1..	1
	Beowulf .....	"	2..	2..	2
GERMAN .....	Elementary German, Grammar and Translation.....	R. Chamberlin	5..	13..	11
	Lectures on the History of German Literature from Klopstock to the present time, minor .....	Dr. Collitz	2..	30..	34
	German Reading, selected, minor..	Dr. Haas	1..	28..	28
	German Reading, Faust, Part I., minor .....	"	1..	27..	27
	German Prose Composition, minor ..	"	1..	27..	27
	Lectures on the History of German Literature from the earliest times to the time of Klopstock, exclusive, major .....	Dr. Collitz	2..	14..	14
	German Reading, selected, major..	Dr. Haas	1..	14..	10
	German Reading, Faust, Part II., major .....	"	1..	14..	14
	German Prose Composition, major	"	1..	14..	14
	Contemporary German Literature, post-major .....	"	2..	3..	..
	German Syntax, Advanced Reading and Composition, post-major.....	R. Chamberlin	2..	3..	..
	<i>Graduate Classes</i>				
TEUTONIC	Gothic .....	Dr. Collitz	2..	7..	..
PHILOLOGY	Middle High German .....	"	2..	3..	..
	Old Norse .....	"	2..	.....	..
FRENCH .....	Elementary French, Grammar and Translation.....	R. Chamberlin	5..	10..	..
	Lectures on the History of French Literature of the Eighteenth and Nineteenth Centuries, minor .....	Dr. Fontaine	2..	31..	2
	French Critical Reading, minor.....	Dr. De Haan	1..	25..	2
	French Prose Composition, minor..	"	1..	22..	2

*Tabular Statement of the Courses of Instruction given in 1898-99  
continued.*

DEPARTMENT	COURSE	INSTRUCTOR	Hours Weekly	NO. IN CLASS	
				1st Sem.	2nd Sem.
FRENCH ..... (continued)	French Reading and Conversation, minor .....	Dr. De Haan	. 1..	. 25..	. 29..
	Lectures on French Literature of the Sixteenth and the Seventeenth Centuries, major .....	Dr. Fontaine	. 2..	. 8..	.....
	Lectures on French Literature, from 1850 to the present time, major...	"	. 2..	.....	. 11..
	French Critical Reading, major .....	"	. 1..	. 8..	. 9..
	French Prose Composition, major..	"	. 1..	. 8..	. 9..
	French Conversation, major.....	"	. 1..	. 8..	. 8..
	<i>Graduate Classes</i>				
	French Novelists of the Nineteenth Century.....	"	. 2..	. 5..	. 7..
	French Composition and Essay Work, advanced .....	"	. 1..	. 3..	. 2..
	Old French Philology .....	Dr. Menger	. 2..	. 3..	. 3..
	Old French Reading .....	"	. 1..	. 2..	. 1..
	French Physiological Phonetics .....	"	. 1..	. 3..	.....
	Old French Seminary .....	"	. 1..	. 3..	. 1..
ITALIAN .....	Italian Grammar, Composition and Critical Reading, minor .....	"	. 3..	. 14..	. 9..
	Italian Classical Literature, major..	"	. 3..	. 3..	.....
	Italian Classical Literature, major..	"	. 2..	.....	. 2..
	<i>Graduate Classes</i>				
	Italian Philology .....	"	. 1..	. 2..	.....
SPANISH .....	Spanish Grammar, Composition and Critical Reading, minor.....	Dr. De Haan	. 4..	. 5..	. 5..
	Spanish Literature, major.....	"	. 3..	. 2..	. 2..
	<i>Graduate Classes</i>				
LIT- ERATURE	Spanish Reading .....	"	. 2..	. 5..	. 3..
	Old Provençal .....	"	. 2..	.....	. 3..
	Elementary Hebrew .....	Dr. Barton	. 4..	. 1..	.....
	Elementary Hebrew .....	"	. 2..	.....	. 4..
	Advanced Hebrew .....	"	. 2..	. 1..	. 1..
	Hebrew Syntax .....	"	. 1..	.....	. 1..
	Arabic .....	"	. 3..	.....	. 2..
	Prophetic Literature .....	"	. 2..	. 5..	.....
	The Pentateuch .....	"	. 2..	.....	. 5..
	New Testament Epistles .....	"	. 2..	. 2..	.....
HISTORY .....	New Testament Historical Books..	"	. 2..	.....	. 5..
	Historical Theology.....	"	. 2..	. 4..	. 3..
	Modern History, from the Treaty of Westphalia to the close of the Napoleonic Campaigns, minor and major .....	Dr. Andrew	. 5..	. 82..	.....
	Modern History, from the Congress of Vienna to the present time, minor and major .....	"	. 5..	.....	. 90..
	English Constitutional History, post-major .....	"	. 3..	. 12..	. 13..

*Tabular Statement of the Courses of Instruction given in 1898-99  
continued.*

DEPARTMENT	COURSE	INSTRUCTOR	Hours Week y	No. IN CLASS	
				1st Sem.	2nd Sem.
HISTORY .....	<i>Graduate Classes</i>				
(continued)	English Feudalism .....	Dr. Andrews	. 2..	. 3..	. 3.
	Economic History of the American Colonies .....	"	. 1..	. 4..	. 4.
	Seminary .....	"	. 1..	. 4..	. 4.
POLITICAL SCIENCE .....	Historical Economic Geography and Demography, minor and major ..	Dr. Keasbey	. 5..	. 61..	. 64.
	Descriptive Sociology, post-major ..	"	. 3..	. 3..	. 3.
	Theoretical Sociology, post-major .....	"	. 2..	. 8..	. 9.
	<i>Graduate Classes</i>				
	American Commerce .....	"	. 1..	. 1..	. 1.
	Political and Economic Theory .....	"	. 1..	. 1..	. 1.
PHILOSOPHY ..	History of Philosophy, required .....	Dr. Bakewell	. 2..	. 64..	....
	History of Philosophy and Ethics, required .....	"	. 4..	.....	. 60
	Psychology, required .....	Dr. Leuba	. 2..	. 65..	....
	Lectures on the Origin and Contents of the Books of the Bible, required	Dr. Barton	. 1..	. 63..	. 59
	German Idealism, minor .....	Dr. Bakewell	. 3..	. 10..	. 14
	Physiological and Experimental Psychology, minor .....	Dr. Leuba	. 2..	. 13..	. 12
	Recent French Philosophy, post-major .....	Dr. Bakewell	. 1..	. 3..	. 3.
	<i>Graduate Classes</i>				
EDUCATION AND PEDAGOGY ..	Seminary .....	"	. 2..	. 3..	. 3.
	Pedagogy .....	Dr. Leuba	. 2..	. 1..	. 2.
ART AND ARCHÆOLOGY .....	Greek Sculpture .....	Dr. Huddilston	. 2..	. 30..	. 33
	Greek Ceramics .....	"	. 2..	. 4..	. 3.
	Roman Archæology .....	Dr. Laing	. 2..	. 10..	. 19
MATHEMATICS ..	Trigonometry, required .....	J. Harkness	. 2..	. 15..	....
	Geometrical Conics, required .....	Dr. Scott	. 2..	.....	. 7.
	Auxiliary Mathematics .....	Dr. Maddison	. 3..	. 3..	. 2.
	Analytical Conics, minor .....	Dr. Scott	. 5..	. 11..	....
	Algebra, Advanced Trigonometry, and Theory of Equations, and Elementary Differential and Integral Calculus, minor .....	J. Harkness	. 5..	.....	. 15
	Differential and Integral Calculus, Differential Equations, major .....	"	. 5..	. 5..	....
	Curve Tracing, Analytical Geometry of Three Dimensions, major .....	Dr. Scott	. 4..	.....	. 1.
	History of Mathematics, major .....	"	. 1..	.....	. 1.
	Modern Pure Geometry, post-major	"	. 2..	. 6..	. 1.
	Analysis, post-major .....	J. Harkness	. 2..	. 5..	. 1.
	<i>Graduate Classes</i>				
	Plane Algebraic Curves .....	Dr. Scott	. 2..	. 3..	. 1.
	Theory of Groups .....	J. Harkness	. 2..	. 4..	. 1.
	Elliptic Functions .....	"	. 2..	.....	. 1.
	Journal Club .....	Dr. Scott and J. Harkness	. 1	. 4..	. 1.



*Tabular Statement of the Courses of Instruction given in 1898-99  
continued.*

DEPARTMENT	COURSE	INSTRUCTOR	Hours Weekly	NO. IN CLASS	
				1st Sem.	2nd Sem.
PHYSICS .....	Laws and Properties of Matter and Sound, minor .....	Dr. Mackenzie	5..	24..	.....
	Heat and Light, minor .....	Dr. Buckingham	5..	.....	23..
	Laboratory Work, minor .....	Drs. Mackenzie and Buckingham	4..	25..	25..
	Theory of Heat, Problems in Mechanics, major .....	Dr. Buckingham	5..	4..	.....
	Theory of Light, major .....	Dr. Mackenzie	5..	.....	3..
	Laboratory Work, major .....	Drs. Mackenzie and Buckingham	5..	4..	3..
	Physical Chemistry .....	Dr. Buckingham	2..	2..	2..
	<i>Graduate Classes</i>				
	Laboratory Work .....	Dr. Mackenzie	4..	1..	.....
	Introduction to General Chemistry minor .....	Dr. Keiser	5..	28..	.....
CHEMISTRY....	General Chemistry, minor .....	Dr. Kohler	5..	.....	28..
	Laboratory Work, minor .....	Drs. Keiser and Kohler	5½	28..	28..
	Theoretical Chemistry, major .....	Dr. Kohler	5..	8..	.....
	Organic Chemistry, major .....	Dr. Keiser	5..	.....	8..
	Laboratory Work, major .....	Drs. Keiser and Kohler	5½	8..	8..
	Advanced Organic Chemistry, post-major and graduate .....	Dr. Kohler	2..	7..	5..
	<i>Graduate Classes</i>				
	Modern Chemistry .....	Dr. Keiser	2..	3..	2..
	Journal Club and Seminary Work ...	Drs. Keiser and Kohler	1..	3..	4..
	General Geology .....	Dr. Bascom	5..	7..	7..
GEOLOGY .....	Laboratory Work .....	"	3..	7..	7..
	General Biology .....	Dr. Morgan	5..	46..	.....
BIOLOGY .....	Plants, Vertebrates and Embryology, minor .....	Drs. Morgan, Warren and Randolph	5..	.....	44..
	Laboratory Work, minor .....	Drs. Morgan and Randolph	5½	46..	44..
	Animal Physiology, major .....	Dr. Warren	5..	5..	.....
	Laboratory Work, major .....	"	5½	5..	.....
	General Zoology, Theoretical Biology, Comparative Anatomy, major .....	Drs. Morgan and Warren	5..	.....	4..
	Laboratory Work, major .....	"	5½	.....	4..
	Morphology, post-major .....	Dr. Morgan	1..	4..	3..
	Laboratory Work, Morphology .....	"	.....	4..	3..
	<i>Graduate Classes</i>				
	Morphology .....	Dr. Morgan	1..	4..	5..
	Laboratory Work, Morphology .....	"	.....	4..	5..
	Physiology .....	Dr. Warren	1..	4..	4..
	Laboratory Work, Physiology .....	"	.....	3..	3..
	Nervous System .....	"	2..	.....	2..
	Journal Club and Seminary .....	Drs. Morgan Warren and Randolph	1..	4..	4..

IX.  
Comparative Statement of the Distribution of Students in the various Departments of Study during the  
fourteen years from 1885 to 1899.

	Sanskrit and Com- parative Philology.	Greek.	Latin.	English Literature.	Anglo-Saxon.	German.	Teutonic Philology.	French.	Romance Philology.	Italian.	Spanish.	Semitic Languages and Biblical Literature.	History.	Political Science.	Philosophy.	History of Educa- tion and Pedagogy.	History of Art.	Mathematics.	Physics.	Chemistry.	Geology.	Biology.
1885-86,	...	30	18	32	...	7	7	10	1	2	...	...	8	...	...	...	...	32	...	10	...	10
1886-87,	1	20	24	39	...	17	...	3	2	...	2	...	15	...	...	...	...	29	...	6	...	22
1887-88,	1	28	36	39	3	42	4	25	2	...	4	...	...	13	45	...	...	12	...	16	...	25
1888-89,	2	40	35	67	7	50	4	26	...	...	1	...	63	17	16	...	...	23	10	10	...	27
1889-90,	6	46	58	76	9	44	4	21	...	...	1	...	34	24	20	...	...	28	7	11	...	26
1890-91,	1	42	59	86	6	46	3	23	...	4	1	...	54	30	16	...	...	35	6	24	...	26
1891-92,	2	36	75	92	8	46	1	28	1	5	1	...	46	40	28	...	...	24	7	31	...	42
1892-93,	4	38	45	135	10	60	2	30	1	8	4	...	57	54	28	...	12	27	27	45	...	42
1893-94,	4	44	80	156	15	71	3	50	1	10	5	7	53	70	52	...	19	32	32	45	...	47
1894-95,	5	51	91	170	10	75	6	83	5	8	9	12	86	53	57	...	...	34	20	71	...	53
1895-96,	3	47	90	179	17	63	11	75	5	8	...	9	85	49	67	...	75	34	16	73	9	84
1896-97,	8	49	100	185	9	74	5	55	4	14	6	13	99	63	79	...	64	33	18	48	3	60
1897-98,	2	56	104	194	5	66	1	70	4	18	4	17	80	84	85	...	21	48	26	35	17	69
1898-99,	1	35	109	264	5	72	7	64	6	19	11	14	105	68	91	3	35	43	32	43	8	58

## X.

*Report of graduate and advanced post-major courses given in the academic year ending June 8th, 1899, together with some suggestions for the improvement of the teaching facilities of the college, compiled from the statements submitted to the President of the College by the instructors in the various departments.*

### *Sanskrit and Comparative Philology.*

The work of this department was conducted by Dr. Hermann Collitz. Dr. Collitz gave a course in Sanskrit for advanced students, two hours a week throughout the year. After an introduction to the study of Vedic literature the hymns selected from the Rig-Veda in Lanman's Sanskrit Reader were read and carefully interpreted. Reference was made to the more recent literature on the subject, and the two volumes of *Vedische Studien* by Pischel and Geldner, were carefully studied.

### *Greek.*

The work of this department was conducted by Dr. Herbert Weir Smyth and Dr. Wilmer Cave France.

Dr. Smyth conducted the graduate course in Greek. It included the reading of Thucydides by the students and the interpretation of selected portions illustrating the narrative and the forensic style of the historian. The seminary met on an average four hours a week throughout the year. The work of the instructor comprised a detailed interpretation of Thucydides's description of the plague at Athens; lectures on the grammar (forms and syntax) of the historian; lectures on the history of prose writing from Herodotus to Xenophon, with the translation of parts of Gorgias, Antiphon, Andocides, and the *State of the Athenians*. The course in Greek prose composition usually given in conjunction with the work in historiography had to be omitted this year on

account of lack of time. In addition to the regular interpretations made by members of the class, two papers on *The Dialect of Bacchylides* and on *The Syntax of the Boeotian inscriptions* have been prepared by candidates for the degree of Doctor of Philosophy.

Dr. Smyth conducted a post-major course in Greek for three hours a week throughout the year. During the first semester the class translated nearly all the three plays of Æschylus's *Oresteia* with a rapid commentary by the instructor; in the second semester most of the idylls of Theocritus were read. The class was afforded frequent opportunity to translate at sight.

Dr. France conducted a post-major course in Plato two hours a week throughout the year. This course was attended by two graduate students and the work was therefore of an advanced character. The *Republic* of Plato was read and discussed and parallel reading was assigned in Plato and Aristotle, and in Platonic literature. The character of the work and the attendance were good.

### *Latin.*

The work of this department was conducted by Dr. Gonzalez Lodge and Dr. J. Gordon Laing.

Dr. Lodge conducted the graduate course in Latin, four hours a week throughout the year. The work was particularly satisfactory; six students attended the course, a larger number than had ever attended heretofore, and all were advanced students, some having done two years of graduate work at Bryn Mawr or elsewhere. The subject was the development of the writing of history among the Romans. A course of lectures was delivered by Dr. Lodge, one hour a week throughout the year, tracing the beginnings of historical composition in priestly and political records and following the growth of the subject through the numerous names of early Roman historians, most of whose work has come down to us in very meagre fragments. Another course of lectures was devoted to Livy and Tacitus. A full treatment of the manuscripts and editions of Livy was followed by a minute

discussion of the work of the last century on the sources of Livy, and this in turn by a similar study of Tacitus.

One hour a week throughout the year was devoted to a seminary meeting in which the students interpreted selected passages from the twenty-second book of Livy and from the *Annals* of Tacitus. In connection with their work in the seminary the students wrote papers on the composition of the adjective in Latin, the authenticity of the later books of Cæsar's *Bellum Gallicum*, the use of the infinitive in Vel-leius, and various divisions of the syntax of Sallust.

The instructor lectured one hour a week throughout the year on Latin syntax, treating especially the syntax of the moods and tenses.

Dr. Lodge met the post-major class two hours a week throughout the year and read with them during the first semester four plays of Terence, and during the second semester three plays of Plautus. This class was greatly handicapped by the hour at which it was held; in the first semester it met in the afternoon, in the second semester in the evening. In each case, however, it was occasionally interrupted by lectures given by invited speakers and by other college functions. It is intended to hold this class next year in the morning, and while this may cause some inconvenience at first, it will perhaps be more satisfactory ultimately.

Dr. Laing gave a post-major course three hours a week during the first semester in Petronius and Apuleius. The Petronius proved too difficult and should be discontinued, at any rate until there is an annotated edition in English. The selections from Apuleius made good class readings. In the second semester in this course selections from Lucretius and Catullus that had not been read or only incidentally touched on in the course in literature were read, seemingly with interest.

In the two hour post-major course given by Dr. Laing Seneca's *Medea* and *Hercules Furens* were read during the first semester and the *Heroides* of Ovid during the second semester. The Seneca was not successful, although in the previous year the same plays, especially the *Medea*, were

read with interest; probably only the *Medea* should be tried again. During the second semester the *Heroides* proved very satisfactory.

Besides the three hour and two hour post-major courses, Dr. Laing conducted a one hour post-major course in Latin prose composition throughout the year. The students were given translations of Latin authors or pieces from English classics to put into Latin. It was assumed that post-major students would have completely mastered the principles of syntax, and would have a sufficiently accurate knowledge of forms to make exercises on syntax and morphology unnecessary, their attention being solely directed to points of style. The assumption did not prove in all cases well founded, and in repeating the course it would perhaps be better to make it a two-hour course, but for one semester only. One day a week could be given up to practical exercises on topics of syntax, i. e., a series of separate sentences bearing on some one point, and one day to the writing of continuous pieces, preferably translations of good Latin prose authors, the original being afterwards shown to the student. This is practically the plan of Dr. Lodge's last book which has been used in the University of Chicago with very great success. The students did not seem to find the work dull—the charge so often brought against courses in Latin prose composition; they worked well, and made substantial progress. The course is one of great usefulness for those who intend to teach. The work was varied by some exercises in Latin verse writing.

In connection with the post-major courses Dr. Laing makes the following suggestion: that there should be a cycle of two years, and that authors or works of minor interest should be included to make it complete. Students in post-major courses are, he thinks, capable of taking up somewhat difficult work; most of them intend to teach and are earnest students. In arranging courses for them attention should be paid, not so much to what is of the greatest interest as reading matter as to what is essential for their equipment as teachers.

If the post-major courses were once arranged on this plan, there would be no further difficulty about finding enough

subject matter for courses. For instance, there ought unquestionably to be a course on ancient philosophy as reflected in the philosophical writings of Cicero. Variety could be given to the course by taking the selections from more than one of his treatises. As it is, the only instruction that Latin students now get in the difficult systems of Roman philosophy is that given in the general philosophy course which, in that it is a general history of philosophy, cannot give them that definite and accurate knowledge of all the details of the different systems, which is really necessary for one who is going to teach Latin authors, many of whose pages are crowded with philosophical allusions. Another course should be given on the history of the ancient oratory as presented in the writings of Cicero and Quintilian. A course on the historians would also be suitable for post-major students, the selections being taken from those writers or works that have not been read in previous years, e. g., the *Histories*, *Agricola*, and *Germania* of Tacitus, Velleius Paterculus, Suetonius, with collateral reading in Merrivale's or some other History of the Roman Empire. This, like the courses spoken of in ancient philosophy and oratory, should be a rapid reading course, and collateral reading in English should be made a very important part of the work.

In all three of these courses there would necessarily be more lecturing by the instructor than in an ordinary reading course. Lighter post-major courses could be made up from the following authors, most of whom have been tried with more or less success: selections from Lucretius and Catullus; *Medea* (or one other play) of Seneca, one book (say the 7th) of Lucan, selections from Statius; selections from the *Amores*, *Fasti*, *Heroides* of Ovid, if these were not read in the minor course; the *Satires* and *Epistles* of Horace, Juvenal, Persius, selected letters of Cicero, especially those that illustrate Roman private life; the *Letters* of Pliny and the *Epigrams* of Martial.

In regard to the conduct of the minor class in Latin, Dr. Lodge and Dr. Laing make the following suggestions: Dr. Lodge states that the minor class in Latin is too large for

satisfactory results. During the last few years it has numbered between forty-five and sixty students, while in other colleges similar classes are not allowed to number more than from thirty to forty students. To divide the class would necessitate either repetition of work, which would be contrary to the principles established by the Trustees from the opening of the college, or a parallel minor Latin course in which different authors were read, thus lessening the numbers by permitting students to elect one of the two courses.

Dr. Laing suggests that in the minor course the work in Horace should be confined to the first semester; while it makes the very best class reading and the students take most kindly to it, it ought not to be spread over the whole year. He thinks that selections from the *Odes* should be the basis of work during the first semester, and that no time should be given up to the *Epistles* or *Satires*, which should be kept for a post-major course. For the second semester in the minor course he suggests the *Heroides* of Ovid which would be sufficient in extent to fill out the course, though it might perhaps be advisable to give variety to the programme by introducing selections from the other works of Ovid. It is not by any means necessary that the same authors should be read in a course year after year, and the *Eclogues* and *Georgics* of Virgil, for example, might be substituted for the selections from Ovid and read in the minor rather than in the post-major class, where they are not successful.

Dr. Laing also calls attention to another suggestion which Dr. Lodge once considered, but decided in the negative, that Terence should be read in the second semester of the first year. The welfare of the whole Latin department depends largely on the success of the minor course, supplying, as it does, the major and post-major classes. It is in this course that the battle is fought out, and the success or failure of the work there is reflected in the size of the classes in the following years. The faults of the minor are visited on the major, and upon the post-major. Everything ought to be done to make the first-year work as attractive as possible and to stimulate the students' interest. If they are



kept working the whole year on a single author there is danger of their becoming bored; if they are assigned reading from authors some of whose works they have already studied at school, they are not very likely to have that sense of advancement which it is in the highest degree desirable that they should have, even if they are not actually advancing with any very startling degree of rapidity; if they are given a composite course they are bound to form a very unfavorable opinion of the range of Latin literature. Surely it is disastrous that at the very outset, in the first year of the course, they should get the impression that the amount of available Latin reading is so small, and that the supply is already beginning to give out.

Terence if introduced would be a new author and a new type of literature, belonging to a new period in literary history. Many would be encouraged to go on with the major and post-major courses, and those whose Latin studies ended with the doing of the required work would have had their literary horizon to some extent widened. It is much easier to find suitable reading for post-major students than it is for freshmen, and the loss to the post-major class could be easily made up. There would be still another advantage in reading Terence in the minor class, namely, that to a certain extent at least it would make the work in the major class in Roman literature easier. The great difficulty of that course is that the instructor finds himself continually obliged to lecture on authors whose writings are wholly unknown to almost every one in the class. For example, up to this time the lectures on comedy have been given to students who had never read a line of Plautus and Terence. They do not translate Latin with sufficient ease to make the reading of any very considerable amount possible, and with the exception of the Harvard edition of the *Phormio* there are no even passably good translations.

The department of Latin in conjunction with that of Greek has endeavored to increase the efficiency of the library as much as possible. With this object in view all the money of the two departments has been spent during the past three

years in the purchase of journals, and during this year the purchase of current books has been neglected. This the instructors feel cannot go on, and after next year the resources of the library must be devoted to making up the arrears. By so doing, however, the completion of the periodical list must be given up. The sum of two hundred dollars would make it possible for the departments of Greek and Latin to be better provided with complete sets of periodicals than any university library in the country, with the exception of Harvard, Columbia, Cornell, Yale, and possibly Chicago.

### *English.*

The graduate work in English was conducted by Dr. Mary Gwinn, Dr. James Douglas Bruce and Dr. William Allan Neilson.

Dr. Gwinn met a class composed of graduate students in English Prose writers of the seventeenth century, two hours a week throughout the year. The authors chosen for special study were as in previous years: Bacon, Hooker, Milton, Clarendon, Fuller, Jeremy Taylor, Burton, and Browne.

A graduate class in the Elizabethan and Jacobean Drama was conducted by Dr. Neilson and met for three hours a week throughout the year. The work in this course consisted of lectures on the development of the English drama from its first beginnings in the liturgy of the Catholic Church to the closing of the theatres in 1642; of reports by the students on topics assigned; and of theses. Among subjects dealt with in the theses were the treatment of Shakespeare by the Restoration dramatists; the Elizabethan interest in language for its own sake; metre in the Elizabethan drama; the mood of the sonnets in Shakespeare's plays; and Shakespeare's treatment of his sources in "As You Like it." Besides those tracing the historical development of the drama, lectures were given on dramatic technique; and the principles there laid down were applied in detail to each of Shakespeare's plays, and to the more important works of the other dramatists.

Dr. Neilson gave also a graduate course on English

and Scottish Popular Ballads, which met two hours a week throughout the year. The work in this course consisted of lectures, reports, and theses. The lectures dealt with the questions of the origin and transmission of ballads, and the related theories of the origins of mythology and folk-lore; the classes and characteristics of the extant ballad literature of Britain; the dialect of the Scottish ballads, and, in outline, with the literature other than ballads but contemporary with them in the same dialect.

Theses and reports by members of the course dealt with the following among other subjects: humour in the ballads, the ethics of the ballad world, the society of the ballad world, and the treatment of tragedy and of romantic love in the ballads.

Dr. Bruce conducted a graduate course in English Historical Grammar two hours a week throughout the year. During the first semester the time was devoted to a series of lectures on the Old English system of sounds and its relation to the systems of the cognate Teutonic language. At the beginning of the second semester a few meetings were given up to practical exercises in the application of the principles expounded in these lectures. The rest of the semester was devoted to lectures on the history of the English language with three lectures on the sound system of middle English.

Dr. Bruce also conducted a graduate course in Beowulf, two hours a week throughout the year. The elements of myth and saga contained in the poem were discussed in the lectures, and during the early part of the year special attention was devoted to the history of the construction of the text. Reports concerning the more important critical literature relating to Beowulf were presented from time to time by members of the class.

Miss Helen Thomas met a class composed of graduate and undergraduate students in descriptive writing, one hour a week throughout the year. Lectures on the style and methods of description of certain modern English and French writers were given, and selected passages from their writings were suggested as models. The class wrote two papers each

week on prescribed subjects, paying special attention to the use of words and to the structure and rhythm of sentences. In the second semester a study of the construction of short stories was made.

The essay work in the first year of the general English has been in some respects reorganised during the past year. Sight papers were set less frequently, and special attention was paid to preparing students for the writing of their first essays. They were required to study one of four prescribed authors, subjects and methods of work being suggested to them; and each student had the benefit of talking over her theme and the plan of her essay in detail with her instructor. Slight changes were made in the rhetoric work given, but it continued in the main the same as in former years. The second of the two required essays was written, as before, on an author chosen by the student. In the essay work of the second year special work on one of six prescribed authors was substituted for one of the four long essays. Each student studied under Miss Helen Thomas's direction some one aspect of the style and subject matter of the author selected, and wrote upon it two short papers. The work of the first and second years was conducted by Dr. Gwinn, Miss Helen Thomas, Miss Potts, Miss Hoyt, and Miss Pettit.

### *Teutonic Philology.*

The graduate courses in Teutonic Philology were conducted by Dr. Hermann Collitz.

Since all the students this year were beginners in the study of Teutonic Philology the courses given were those which constitute the first year's work, with the one exception that, by special request, Old Norse was substituted in the second semester for Old High German.

A course in Gothic was given two hours a week throughout the year. The course, as usual, served as an introduction not only to the study of the Gothic language, but also to that of the elements of comparative Teutonic grammar. Wright's *Gothic Primer* was used as a text book and fur-

nished the Gothic texts which were read in connection with the course.

Middle High German was studied two hours a week during the first and one hour a week during the second semester. The elements of Middle High German grammar were studied and most of Hartman's *Armer Heinrich* read during the first semester, while the second semester was chiefly devoted to the reading of selections from the *Nibelungenlied*.

Two hours a week during the second semester were given to the study of Old Norse. As in previous years, Sweet's *Icelandic Primer* was used as a text book for the study of the language and for the reading of easy texts, selected from the younger Edda. As far as the time allotted to this course would allow, the forms and the vocabulary of the Old Norse language were compared with those of Gothic and Anglo-Saxon.

### *German.*

The work of this department was conducted by Dr. Hermann Collitz, Dr. Albert Haas, and Miss Rose Chamberlin.

Dr. Haas's post-major course in contemporary German literature met two hours a week throughout the year. The first semester was devoted to the study of those authors who, at the present day, continue the traditional development of German literature. A short account of the main currents in German literature during the earlier part of the nineteenth century was given and their influences on modern writings were discussed. The work of the second semester covered the more recent period of the contemporary revolution in German literature. Its causes and its origins were exposed and its first naturalistic phase was thoroughly studied. Students reported on several of Hauptmann's and Sudermann's dramas, and special attention was paid to the development of the German novel. The neo-romantic revival in German literature was finally indicated.

Miss Chamberlin conducted a post-major class in ad-

vanced prose composition one hour a week throughout the year. Sudermann's *Es War* was read with literary and linguistic comments. Three students attended the course during the first semester and four during the second.

While the arrangement of the minor and major German courses has been on the whole the same as in the two previous years, a change has been made in the lectures on German literature. According to the plan followed heretofore the minor year was devoted to the study of the period from Klopstock to Goethe's death, the major year to that of earlier German literature down to Klopstock, and the post-major year to that of contemporary German literature. It has seemed advisable to rearrange the courses so as to begin in the minor year with German literature from the earliest times down to the middle of the last century, then to continue in the major year with the period from the middle of the last to the beginning of this century, and finally in the post-major to carry on the history of the literature from the beginning of this century to the present time. This rearrangement leaves the post-major course unchanged, but reverses the lectures on literature in the minor and the major.

Miss Chamberlin conducted a class in German conversation as a free elective, which, however, did not count towards a degree, one hour a week throughout the year. Five students attended regularly and others irregularly. Though the class is very informal, good results were attained this year.

### *French.*

The work of this department was conducted by Dr. Joseph Auguste Fontaine, Dr. Louis Emil Menger, Dr. Fonger De Haan, and Miss Rose Chamberlin.

Dr. Fontaine met the graduate students two hours a week throughout the year. A course of one hour a week was given on the development of the French novel during the seventeenth, eighteenth, and nineteenth centuries. Some of the works of Honoré d'Urfé, Gomberville, La Calprenède, Mlle. de Scudéry, Sorel, Scarron, Furetière, Madame de La

Fayette, Le Sage, Marivaux, Prévost, Rousseau, Madame de Staël, Benjamin Constant, Stendhal, and Balzac were analysed and read by the students in whole or in part. Considerable interest was shown by the students who took this course and from time to time subjects were assigned for special investigations. The students in post-major French literature were also admitted to the above course and were allowed to count it as a two-hour course, on condition that the course should be supplemented by private reading assigned by the instructor. Another course of one hour a week on composition and essay work in French was given to graduate students exclusively. This course consisted of selected passages translated from English into French and of original French essays, the subjects for which were sometimes left to the choice of the students and sometimes assigned by the instructor.

The courses offered by Doctor Menger were arranged in the manner indicated in the President's Report for 1897-98; three distinct series of courses were arranged for students in their first, second, and third year of graduate study. The first-year work consisted of three courses: one in Old French Philology, a second in Old French Texts, and a third on French Physiological Phonetics.

The first class in Old French Philology met two hours a week throughout the year and was attended by three students. The lectures were devoted to bringing out the principles of the development of French sounds and forms from the *Popular Latin*. In application of these principles about one hundred lines of the *Vie de St. Alexis* were examined critically by the students and reported on in class.

The course on Old French Texts met one hour a week throughout the year. The time was devoted to reading as rapidly as possible, in order to make the students familiar with the forms of the various dialects in different periods. The following texts were read in entirety: *Chanson de Roland*, Philippe de Thaun's *Computus*, *Voyage de Charlemagne*, *Vie de St. Alexis*, *Aucassin et Nicolette*, Marie de France's *Lais*. In addition to these works, fragments of the

latest monuments published in all the Chrestomathias were read.

The course on French Physiological Phonetics met one hour a week throughout the year. In this course the sounds of the modern language were studied and classified according to their nature and production, and were then used to throw light upon the development of the sounds of the language in its earlier stages. An outline of general phonetics and of the historical development of the science was also given.

The subject of the second year course was Italian Philology, and the report of this work is included in the report of the Department of Italian.

The work of the third year course consisted of the Seminary in Old French Dialects, which met two hours a week throughout the year. The work was carried on entirely by means of reports from students on assigned topics. After an examination and classification of the extensive literature on the nature, formation, and division of dialects, the French dialects were taken up and studied, first in their geographical and historical aspects. The linguistic phenomena occupied the time of the class for the rest of the year. Ile de France was first examined; then the Norman, Picard, Walloman, Burgundian, Lorraine, Champagne and Southwestern Group. One or two old texts of each were carefully, though not critically examined, since the object of the year's work was to gain a general idea of French Dialects. In another year one particular group will be studied for the entire year.

During the latter part of the year the students of all three years formed a Journal Club and read reports and reviews of important articles and books which had appeared in 1898 and 1899.

### *Italian.*

The work of this department was conducted by Dr. Louis Emil Menger.

The graduate work of this department consisted of a course in Italian Philology, which was open to those students only who had attended the first year courses in Romance Lan-



guages in 1897-98. The work consisted partly of lectures, partly of reports from students on specially assigned topics. The general plan of the course was the same as that indicated for French Philology. For application to separate sounds and forms about fifty lines of *Il Novellino* were examined critically.

Doctor Menger met the major class in Italian two hours a week throughout the year. The first semester was devoted to the study of Dante, whose *Divina Comedia*, the entire *Inferno*, and selected portions of the *Purgatorio* and *Paradiso* were translated in class. In the second semester the instructor gave an outline of the history of early Italian poetry, and in connection with this, portions of Petrarch, Ariosto, Pulci, and Tasso were read by the students.

A class of nine students in Minor Italian met three hours a week throughout the year. The work was directed towards acquiring a sufficient reading knowledge of modern Italian; the essentials of the grammar were carefully studied and about fifty graded exercises in composition were assigned. A number of modern texts and, at the close of the second semester, a comedy by Goldoni were read in class.

### *Spanish.*

The work in Spanish was conducted by Dr. Fonger De Haan.

Since the graduate students in the department of Romance languages were unacquainted with Spanish, the graduate work confined itself to a thorough training in the modern language. Meeting two hours a week, Ramsey's *Text-book of Modern Spanish* was worked through, after which a part of each session was set for taking down in Spanish a piece dictated in English. The following works were read: Garcia del Real, *La noche toledana*; Galdós, *Marianela*; Valera, *El comendador Mendoza*; Galdós, *El amigo Manso*; Trueba, *Nuevos Cuentos populares*; *Lazarillo de Tormes*; Coloma, *Pequeñeces* . . . ; Zorrilla, *Granada*.

The work of the major course in Spanish consisted of a study of Cervantes. After a few introductory lectures on

the author, his times, and his position in literature, all his prose works, several of his plays, and selected passages from his poems were read and commented upon. For practice in composition, selected passages from Macaulay's *Essays* were translated and discussed. The class met two hours a week throughout the year.

The minor course met four hours a week throughout the year. Manning's *Practical Spanish Grammar* was studied, the exercises being supplemented by sentences and short pieces dictated in English and written down in Spanish. The works read in class were: Garcia del Real, *La noche toledana*; Pérez Nieva, *Tomás el torrero*; Galdós, *Marianela*; Hartzenbusch, *Los amantes de Jeruel*; Zorrilla, *Granada*. The private reading consisted of Isaac's *Maria*.

#### *Semitic Languages and Biblical Literature.*

The work of this department was conducted by Dr. George A. Barton. In Semitic Languages four courses were given. A class in Hebrew for graduate students who wished to undertake an extended course of study in Semitic Languages, met four hours a week during the first semester and one hour a week during the second semester. The elements of the language were very successfully mastered, half the book of *Genesis* was interpreted, some of the principles of Hebrew syntax were studied and applied, and a satisfactory amount of translation of English into Hebrew was accomplished.

During the second semester a course in Arabic of three hours a week was given at the request of the class instead of the course in Assyrian that was announced. Socin's grammar was used, and the class acquired a good knowledge of the elements of the etymology and syntax of the language. Various extracts from Arabic prose authors were read.

In order that the work of the department might meet the needs of students whose work had been planned before the new arrangement of courses in Semitic languages was announced a special course in advanced Hebrew was given. This class met two hours a week during the first semester

and one hour a week during the second semester. The chief work of the class consisted of a study of selected portions of the Psalter. The text of the *Septuagint* was constantly compared, the psalm in question being interpreted with amended text, if necessary, and the interpretations of the principal modern scholars, de Wetter, Kösters, Hengstenberg, Van Lengerke, Hitzig, Ewald, Hupfeld, Nowack, Olshausen, Delitzsch, Perowne, Cheyne, Baethgen, Kirkpatrick, Maclaren, and Wellhausen, being compared. The growth of the *Psalter* as a whole was studied, help being obtained in this from the works of many other scholars besides those mentioned above. During the first semester part of the time was devoted to sight translations of Hebrew prose.

At the request of four students, one graduate and three undergraduates, a free elective course in Elementary Hebrew, not previously announced, was given two hours a week during the second semester. The class was much interested, and although the time at its disposal was short, the progress made was very satisfactory.

In Biblical Literature the work was given as previously announced in the program.

Two hours a week throughout the year were devoted to the Old Testament literature. During the first semester the course on the Prophets was given, with little variation from the manner in which it was given last year. In the second semester the time was devoted to the Pentateuch. The course was the same as that given on the same subject before, except that the study of the analysis was carried through the whole Pentateuch and the book of Joshua. This was possible because the class devoted twice as much time to it as any previous class had done.

In like manner two hours a week were given to the literature of the New Testament, the epistles being studied in the first semester and the historical books in the second. The course opened with a brief study of New Testament history, and an outline of the way the books have been transmitted to us; then each epistle was thoroughly studied in the light of modern research. In addition to reports from

various modern authors which were made from time to time, special topics were investigated and the results embodied in essays.

In the second semester a detailed comparison of the synoptic gospels was made and the various theories for the solution of the synoptic problem tested; the fourth gospel was carefully analysed and compared with the others in detail and the various theories of its origin brought to the touchstone of our own results. An important feature of this course was the study of the Acts of the Apostles. Several efforts have been made within the last ten years in Germany and Holland to discover the sources from which its author drew. The results of these efforts are not harmonious as yet, but are very suggestive. Although they are for the most part ignored by English and American scholars, they were put to the test in our study of the book, and added much to the interest and profit of the subject. Special investigations were also made by the members of the class, the results of which were embodied in theses.

The course in Historical Theology, announced last year to run through two years, was begun and given in so far as outlined for the present year. The work of the first semester on the heathen Semitic religions had never been given in the college before. It began with a study of the social condition and religious ideas of the primitive Semites, and traced the main lines of social and consequent religious development through the various Semitic nations. Most of the time was given to the development of the gods in their relation to man and nature, but the conceptions of sin, sacrifice, forgiveness, and the life after death were also studied. Special topics were also investigated by the students and some excellent papers were written.

During the second semester the religion of the Hebrews was studied from its point of departure from other Semitic religions to the birth of Christianity. This portion of the work was, with the necessary changes, identical with the first half of the course on the Progress of Religious Ideas in the Bible, which has been given in former years. Through-

out the course reports were made by the students from the best modern works on the subject in hand. The class met two hours a week.

### *History.*

The work of the department of history was conducted by Dr. Charles McLean Andrews, and consisted, as usual, of both graduate and undergraduate courses, which have been taken during the year by over one hundred students and hearers.

To graduate students three hours of lecture work were given in two sets of lectures, one of two hours a week on English Feudalism, and the other of one hour a week on American Economic History. Each of these courses was given for the first time this year. That on English Feudalism began with lectures on the origins of continental feudalism and presented the views of Waitz, Roth, Brunner, Schroeder, Fustel de Coulanges, Bourgeois, Flach, and others, from whose writings copious references were given to the class for private reading and reports. The lecturer then passed on to the English aspects of the subject and dealt with the personal relations of man to man, the growth of feudal tenures, and the varying forms of seignorial jurisdiction as shown in the laws, chronicles, charters, in Domesday Book and the post-Domesday chartularies, and in the charters of liberty from the reign of Henry I to that of Henry III. Considerable use was also made of the writings of Glanville and Bracton. Maitland's *Domesday Book and Beyond* and Pollock and Maitland's *History of English Law* were the chief modern authorities.

The second course dealt with certain aspects of the economic history of the American colonies, with special reference to the old British system of colonial administration, and touched upon the general colonial movement in the seventeenth century, the rise of the mercantile system, the character of the navigation acts and their application, illegal trading and smuggling, admiralty courts, the land system of the colonies and the influence of the agrarian conditions on

the economic life of the colonists, the relative importance of the agricultural, manufacturing, and commercial interests in the southern, middle, and northern colonies, and thus prepared the way for a discussion of the period after 1696, when the British colonial administration first took definite form and the growth of an economic and commercial independence among the colonies made possible an eventual political independence.

The first of these courses was taken by three students, the second by four; at the seminary meeting, which was held fortnightly, special reports on the following subjects were given: Studies in the geographical rearrangement of Middlesex and Warwickshire in *Domesday Book*, by Miss Bramhall; Frankalmoign in the Gloucester Chartulary, by Miss Bramhall; Admiralty cases in New York, 1707-1760, by Miss Oberge; Commercial History of North Carolina, by Miss Fogg; and Indian Grants in Pennsylvania, by Miss Lamb. In addition regular reports were made on articles in the journals and on recent historical works by all the members of the seminary.

The post-major course in English constitutional history was taken by thirteen students, and the period studied extended from the earliest times to the Revolution of 1688. By the increase of the hours allotted from two to three a week the class was able to devote considerable time to certain selected periods such as those of Henry II, Edward I, and Elizabeth, and reports were made upon selected topics by every member of the class. Stubb's *Select Charters* and Prothero's and Gardiner's collections of selected documents were taken as text books.

### *Political Science.*

The work of this department was conducted by Dr. Lindley Miller Keasbey.

Two graduate courses, each of one hour a week throughout the year, were given and attended by one student. In the course on Political and Economic Theory lectures were given on the theories of the various writers on the subject.

The student was required to report on the different books, making comparative and critical studies of the various theories considered. In the course on American Commerce lectures were given on the economic and commercial geography of America. The student classified and catalogued the United States Government documents bearing on economic and commercial geography. This work will be of great service to the department. The student then confined her attention to the economic geography of the Carribbean section; her report on this work was accompanied by a number of excellent maps. The whole subject is practically an unworked field and the graduate work this year could only clear the ground and plan the proper lines of research. The work done was very satisfactory.

The post-major course met five hours a week throughout the year, two hours a week being devoted to Theoretical Sociology and three hours a week to Descriptive Sociology.

The course on Theoretical Sociology consists of a critical study of the works of Comte, Spencer, Giddings, and Loria on sociology. Special reports were assigned to individual students and the class room work was devoted to interpretation and general discussion. The work done by the students was very satisfactory.

The course in Descriptive Sociology was confined to a study of the economic antecedents of society and a comparison of social institutions. The course was conducted entirely by lectures. Two written theses were assigned to each student; the papers handed in this year were the best thus far received in this course.

### *Philosophy.*

The work of this department was conducted by Dr. Charles Montague Bakewell and Dr. James H. Leuba.

The graduate work, under the direction of Dr. Bakewell, consisted of a seminary course in the philosophy of Hegel and a lecture course one hour a week throughout the year on Recent French Philosophy.

Dr. Leuba's report is given in full as the department of physiological psychology was opened this year.

A beginning was made in equipping the rooms on the fifth floor of Dalton Hall, newly fitted up for a psychological laboratory. Three hundred and fifty dollars was expended in the purchase of the most indispensable pieces of apparatus and the general material necessary for an introductory course in experimental psychology.

The laboratory now possesses the following instruments: A sonometre, two large C forks on resonance cases, one C, fork on resonance case, a Wheatstone stereoscope, a set of diagrams for the study of optical illusions, a color mixer, a small kymograph with accessories, two recording Marey's tambours, an electrical time marker, an electric vibrator of 100 vibrations a second, a pneumograph, a sphymograph, a recording apparatus, a small induction coil, a metronome, four æsthesiometres, a perimetre, a line-division apparatus, reaction keys, a "Porter" electric motor, nine sets of plaster brain models (three pieces in each set), several charts of the nervous system and a large number of diagrams. The laboratory has been connected with the electric battery kept in the basement.

Although far from adequate, the equipment of the laboratory made it possible to give for the first time in the history of the college an elementary, but systematic, course in experimental psychology such as is now generally given in the best colleges of the United States.

Two courses in psychology were given. In the elementary course, two hours a week until Easter given as part of the general philosophy required of all students, it was attempted within the narrow limits set by insufficient equipment to introduce the demonstration method—a method long since adopted in the teaching of the physical sciences. By its use the student is led, from the very beginning, to look upon psychology as a science and to approach it in a scientific spirit. It appears highly desirable to continue developing this course in the direction indicated as rapidly as means will permit the purchase of apparatus specially adapted for



demonstration before as large a class as this one, sixty-five students being enrolled.

Frequent class discussions brought about their usual good results and did not entail the waste of time to be feared when the Socratic method is used in a large class.

It would be desirable to have the required course in psychology extended so as to cover a whole year. It would then be possible for it to attain the double purpose which it seems called upon to fulfil: to give to the general student a comprehensive view of psychology and at the same time to serve as an introduction for those desiring to specialise. With a fourteen weeks' course of two hours a week these two ends cannot be reached satisfactorily; the ground that should be covered for the general student must either be contracted for the sake of greater thoroughness of treatment, and then the first end is defeated; or, the subject matter remaining uncurtailed, the thoroughness that would be required in the interest of the students desiring to take advanced courses in psychology becomes impossible.

The more advanced course in psychology consisted of one hour of lecture and of two hours of laboratory work a week. This course was given as a part of the minor philosophy, but could be elected separately. It was attended by thirteen students, seven of whom were graduates. The lectures covered the ground of a general course with the emphasis placed on the psycho-physiological side. The students were not prepared for more advanced work. In the laboratory the manual of Sanford was used as a guide. In connection with the study of the nervous system and of its functions each student dissected a sheep's brain.

Lack of space and the impossibility of duplicating apparatus made it necessary to divide the class into three sections, meeting at different times. It is hoped that an expedient so wasteful of the instructor's time will not have to be continued very long. The present laboratory must be looked upon as merely provisional not only on account of insufficient space accommodation but also because its situation immediately under the roof of Dalton Hall makes it unus-

able as soon as the warm weather sets in. Several times during the month of May the class was obliged to ask for the use of rooms on the lower story.

In addition to their work in the practice course, two graduate students, Miss M. Hussey and Miss N. Wood, took part in an investigation carried on by the instructor on the relation of the tactile discrimination sensibility to intellectual fatigue. They made a series of tests on several students, the results of which have been incorporated in a paper published in the *Psychological Review*.

### *Education.*

The work in education was conducted by Dr. James H. Leuba. A course of two hours a week throughout the year was given in the history of pedagogy, with reference to the present methods and problems of education. By means of readings from the works of the educational reformers, accompanied by lectures and class discussions, the students were instructed in the development of the ideas of education and made familiar with its problems and with much of the wisdom accumulated by a long line of thinkers and experimenters. The reading included portions of the writings of Plato, Montaigne, and Rabelais, which bear on education; and also the following works: *The Great Didactic*, by Comenius; *The Education of Girls*, by Fenelon; part of Locke's *Letters on Education*; Rousseau's *Emile*; part of Pestalozzi's *Leonard and Gertrude*; Froebel's *Education of Men*; several papers on *The Kindergarten* in the Barnard collection of pedagogical papers; selections from Herbart's *Science of Education*; De Garmo's *Herbart and the Herbartians*, etc.

A graduate student attending the course wrote during the year several papers on the topics under discussion. The class has been much smaller than might have been expected in a college attended by a large number of students intending to become teachers. The smallness of the class was partly due to the hour at which the lectures were given, and partly to a feeling against the study of pedagogy. In this connec-

tion the recently printed words of President G. Stanley Hall may be appropriately quoted:—

“It is a sin of omission for which the heads of some of these institutions will be held to a sharp account, that they allow their students to begin a pedagogical career without having had any opportunity to learn the fundamental principles of the history of education.” (The Outlook, August 5, 1899.)

The most urgent need of the department of education is a practice school of secondary grade, in which the students may gain some knowledge of the difficulties encountered by the teacher and may have the opportunity of applying and finding out the meaning and the value of what may be said in theoretical courses. Education is, before everything, a matter of practice; until a practice school or its equivalent has been provided, it seems unwise to multiply theoretical courses.

### *Art and Archæology.*

The work of this department was conducted by Dr. John Homer Huddilston and Dr. Gordon J. Laing.

A course in Greek Ceramics was given by Dr. Huddilston two hours a week throughout the year and was attended by four students (three graduate students and one hearer) during the first semester, and by three graduate students during the second semester. During the first semester the time was devoted to the history of the vase industry in ancient Greece, the succeeding periods were taken up with some detail. The interdependence of the arts in Hellas was kept in the foreground, and the value of the vase paintings as testimony on questions pertaining to Greek life and religion was continually emphasised. The work in the second semester was a study of the vase-paintings that are based upon scenes in extant Greek poetry, especially the *Iliad* and *Odyssey*, and the plays of Æschylus and Euripides. Each student was required to present a paper each semester which was discussed in class.

A course in Greek Sculpture was given by Dr. Hud-

dilston two hours a week throughout the year; twenty-six students attended during the first semester and thirty-five during the second semester. Being a free elective all classes of students from freshmen to graduates were enrolled. The aims of the course were threefold: to gain a general survey of the history of sculpture among the Greeks; to inspire in the students an appreciation of the artistic life of the Greeks, and, lastly, to enable the student to form an independent judgment on works of plastic art. The final examination showed that the majority of those attending the course had gone far towards reaching the desired goal. Two hours a week, however, was too limited a time in which to cover the ground satisfactorily.

Dr. Laing conducted an elective course in Roman Antiquities, two hours a week throughout the year. The first semester was given up to Etruscan and Roman antiquities, the lectures dealing with the most important sites and excavations, and, as far as possible, reconstructing the ancient buildings. The second semester was spent on Roman Private Life, with special reference to the discoveries at Pompeii and Herculaneum. The lectures were illustrated by lantern slides.

The course was found to be useful in supplementing the work of the Latin department, and a course of this kind ought to be given every year, not running through the whole year, but beginning with the second semester. Such a course could be alternated as follows:— Roman Private Life one year, Roman Religion the next, Roman Administration a third. It would help to round off the whole work of the department which would then offer instruction on the three sides which go to the making up of a complete Latin curriculum—the grammatical and philological, the literary, and the institutional.

### *Mathematics.*

The work of this department was conducted by Dr. Charlotte Angas Scott, Mr. James Harkness and Dr. Isabel Maddison.

In the graduate department the customary two courses and a special course on Elliptic Functions were delivered. Dr. Scott lectured two hours a week throughout the year on the Theory of Plane Algebraic Curves. The lectures entered with great fulness into the general nature of a curve and its simpler singularities, both as affecting the points and lines, and their relations as expressed by Plücker's equations; much time was given to the part of the theory that deals with groups of points determined by curves, and curves determined by points of given order; a brief account of certain topological investigations was given.

Mr. Harkness lectured two hours a week throughout the year on the subject matter of Weber's *Algebra* and Hilbert's *Bericht*. The object of the course was to familiarise the students attending it with the principal notions contained in the recent development of algebra on the side of the theory of numbers. Special attention was paid to the theory of ideals and to the Galoisian theory of equations. Incidentally a considerable amount of time was given to the study of the theory of finite groups, and collateral reading was assigned.

Mr. Harkness also gave two hours a week during the second semester to a special course on the transformation theory in elliptic functions, and on the theory of elliptic modular functions. The principal memoirs on these subjects in the *Mathematische Annalen* were assigned as collateral reading.

The fortnightly meetings of the Journal Club, which it had been found necessary to suspend during the year, 1897-98, were resumed to the satisfaction of all concerned. Reports on selected memoirs and fields of investigation were delivered by the instructors and students in turn. These meetings are a most important adjunct to the provision for formal instruction made by the department, both in the encouragement they offer to students to recast the results of investigations into a form adapted to an assigned purpose, and in the opportunities thus presented of becoming acquainted with topics that cannot well be included in the regular courses.

The necessary direction of individual work was given by one or other of the professors, according to the subject. A word may fitly be said in recognition of the uniform diligence and interest displayed by all the graduate students in this department. Miss E. N. Martin, former resident fellow, and Mary E. Garrett European fellow in 1897-98, has this year completed all requirements for the degree of Doctor of Philosophy; her thesis, on the non-primitive groups of degree fifteen and the primitive groups of degree eighteen, will be published shortly in one of the mathematical journals.

Four hours of post-major work have been given in two two-hour courses. Dr. Scott lectured on Modern Pure Geometry, Mr. Harkness on Special Topics in Modern Analysis.

In Dr. Scott's course, Reye's *Geometrie der Lage*, Vol. I, was the text book, the lectures being mainly expository and critical. A number of the later lectures of the course departed widely from the lines indicated in Reye, in order to acquaint the students with some of the characteristic features of other systems of pure geometry.

As Mr. Harkness's course was attended mainly by graduate students, the subject matter was of a more advanced character than usual. In the early part of the year an account was given of the researches of Weierstrass and Dedekind relating to an algebra with  $n$  units; this was followed by a treatment of non-commutative algebra, including in particular discussions of matrices and of the connection between quaternions and the expression  $\frac{ax + b}{cx + d}$ . Later on much attention was given to modern refinements in the theories of Fourier's Series, the hypergeometric function, and determinants.

A preparatory course in mathematics covering all the mathematics necessary for the second year of the major course in physics was given this year for the first time by Dr. Maddison. It was found possible to cover the required ground in the allotted time and to review the work carefully. The class met three hours a week throughout the year, and worked diligently.

### *Physics.*

The work in Physics was conducted by Dr. Arthur Stanley Mackenzie and Dr. Edgar Buckingham.

One graduate student, Miss Emilie N. Martin, who has been taking a double minor in Physics for the degree of Ph.D., spent four hours a week in the advanced laboratory during the first semester, working under the direction of Dr. Mackenzie. This time was devoted to a study of the effects of the surrounding medium on the period of a tuning-fork; one part of the investigation was completed, but will not be published until the whole is finished.

During the year the workshop has been greatly improved by the addition of two new lathes and a drill press. The gift of Miss Garrett for a 14-inch swing Gem engine lathe has been much appreciated; an Oliver speed lathe has been bought out of the regular appropriation; and the drill press has been made in the shop. The improvement has given great satisfaction to the department, for we now have a modest, but fairly complete, outfit of tools, and all but very special kinds of work can be done in the shop. Several instruments which have been lying unfinished in the laboratory for years, because the old lathe was not fit to do fine work, have now been completed. During the year the workshop has been engaged in duplicating pieces of apparatus for undergraduate work, when it could be done economically. The mechanician, Mr. Banner, continues to give entire satisfaction.

Dr. Buckingham lectured two hours a week throughout the year to a post-major class of two students on physical chemistry, including the elements of thermodynamics, thermo-chemistry, theory of solutions, the mass law, reaction velocities, the phase rule, chemical equilibria, and electro-chemistry.

The minor and major courses were given during the academic year, 1898-99, very much as in former years, but with this exception, that the direction of the laboratory work was divided differently between the two instructors. For several years past Dr. Buckingham has taken charge of the

minor laboratory and Dr. Mackenzie of the major; during the past year each instructor has had control of the laboratory work of the class to which he was at the time delivering lectures. This method seems to promise better results than the former one, and will be given a further trial. On account of the comparatively large number of students in the minor class, and the inadequacy of the laboratory equipment to supply their requirements, advantage was taken by Dr. Mackenzie of the fact that no graduate lectures had to be given in order to devote a good deal of attention to improving the appliances and methods in use in the minor laboratory. The result has been a material improvement in the working of the laboratory; but it need scarcely be added that the apparatus must be largely duplicated if the laboratory is to be brought to a high state of proficiency.

### *Chemistry.*

The work in Chemistry was conducted by Dr. Edward H. Keiser and Dr. Elmer P. Kohler.

Dr. Keiser gave a course of lectures two hours a week throughout the year to graduate and post-major students upon the historical development of chemical theories. This course extended through both semesters and was taken by three students, the fellow in chemistry, one graduate student and one post-major student. At various times during the year these students were called upon to deliver lectures upon assigned topics. During the first semester an investigation upon the metallic derivatives of acetylene was carried on by one graduate student.

Dr. Kohler lectured to graduate students two hours a week during the first semester on experimental methods in organic chemistry in completion of a course begun in the second semester of 1897-98. In the second semester the subjects of the course were: stereochemistry of carbon compounds, of nitrogen compounds and of complex inorganic compounds.

In the second semester the seminary and journal club met in alternate weeks. The work of the seminary supple-



mented that of the lectures discussing nitrogen compounds, amines and amides, hydroxylamine derivatives, hydrozines, negative groups and their influence upon the properties of a substance. In the journal club current literature on the subjects dealt with in the lectures and seminary was discussed.

In the laboratory the Fellow in Chemistry, Miss M. B. MacDonald, prepared the following papers on the result of research work: "The Reaction Between Sulphone Chlorides and Metallic Derivatives"; "Disulphones," both papers being accepted for publication in the *American Chemical Journal*; "Ketosulphones," accepted for publication; "Bromechylene-sulphonic Acid," in print; "Reaction Between Sulphocyanates and Metallic Derivatives," in the press; "Reactions of Sulphone Chlorides," ready for publication.

### *Geology.*

The work in Geology was conducted by Dr. Florence Bascom.

Some additions and alterations were made in the minor course in Geology, which met five hours a week throughout the year. A special effort was made to give the students an insight into methods of solving geological problems. Field work was used not only to illustrate the principles of the lectures but also to furnish problems for solution by the student. Independent field work was carried on by the students, and in some cases considerable areas were covered in a creditable manner. The discovery of a hitherto unknown occurrence of serpentine was made by an undergraduate student and aroused considerable interest in the Philadelphia Academy of Science.

Each student made her own geological map of the neighborhood of Bryn Mawr, and this was done with more success than formerly. One result of the more independent work of the students was a more general use of the geological library. With the assistance of the prepared determinative keys it was possible to cover more ground in historical and palæontological geology than in former years. In connection with the latter course an excursion was made to the

fossiliferous deposits of southern New Jersey. As usual during the winter months journal meetings replaced the field excursions. Among the subjects discussed at these meetings was the geology of those regions which had become familiar to members of the class during the summer holidays. During the year each student was required to write a report on the geology of her native state. One member of the class wishes to specialise in geology, and will spend the summer in field work and return next year for a course in petrography, which will be given for the first time.

In the spring Professor R. D. Salisbury, of the University of Chicago, gave an illustrated lecture to the geological students on "The Yellowstone National Park."

The department is still hampered by an insufficient library appropriation and was unable to buy books that are urgently needed. During the year twenty specimens of rare rock types from Arkansas, a small collection of mineral crystals and a collection of 113 mineral slides have been bought for the department.

As gifts the department has received fifteen mineral specimens from Mr. Theodore D. Rand, and a few specimens from other sources.

The survey of the Philadelphia folio sheet has been completed, and at the request of the U. S. Geological Survey the work will be further extended, northeast to the New Jersey state lines and southwest to the Maryland border.

The instructor has also been engaged this winter in a petrographical study of the volcanics of the Neponset basin, Boston. This investigation is conducted in connection with elaborate survey of the Boston basin made by Professor Crosby, of the Massachusetts Institute of Technology.

### *Biology.*

The work in Biology was conducted by Dr. Thomas Hunt Morgan, Dr. Joseph W. Warren and Dr. Harriet Randolph.

The graduate students in Morphology have succeeded in accomplishing a very creditable amount of research work

during the year. Four students attended the lectures on Morphology and took part in the seminary and journal club meetings. Miss Lilian Vaughan Sampson has been carrying on some investigations which are now nearly ready for publication. One of the members of the Johns Hopkins marine laboratory, Mr. Story Conant, has very kindly supplied some much-needed material to supplement the investigation. Miss Helen Dean King, Fellow by Courtesy, has finished her thesis entitled "The Fertilisation and Maturation of the Egg of *Bufo Lentiginosus*." In addition she collected in the spring some stages in the fertilisation of the egg that are difficult to obtain, and in consequence will be able to make further additions to the subject on which her thesis was written. Miss Annah Putnam Hazen has successfully carried out an interesting and important experiment in grafting; the results will shortly be published. Miss Elizabeth W. Towle has done most excellent work and discovered some new facts in regard to the heliotropism of certain forms on which she has worked.

Dr. Warren gave two graduate courses during the year; one, on the Central Nervous System, announced as a post-major course, was given two hours a week during the second semester in accordance with the special request of two graduate students. The course on the structure of the eye and some of the problems of vision was attended by four graduate students, who also took part in the seminary and journal club meetings. Laboratory work in physiology was done during the year by several graduate students. Miss Hazen, the Fellow, was occupied during a part of the time with an effort to determine the secretory processes of the kidney of *Limulus*, using material which she had prepared at Dr. Warren's suggestion in the laboratory at Woods Holl during the summer. She then undertook some experimental work on the frog's heart chiefly for the purpose of acquiring familiarity with instrumental appliances and methods. During the latter portion of the year Miss Hazen studied the problem of the circulation in the veins of the kidney of the pigeon in the hope of clearing up the unsettled question of the existence of a "renal portal system" in these birds. She has shown great

skill and unlimited patience in making injections with gelatine or celloidin and has been successful in solving the problem so far as it can be examined at present and by this method.

Miss King, Fellow by Courtesy, has worked with Dr. Warren in fulfillment of the requirement of her minor for the Ph.D. degree. The work has been chiefly an investigation of the genuineness of the ordinary ergographic methods, and this has led to a study of the curve of voluntary muscle fatigue by a method which is somewhat novel and will lead to some interesting results if suitable persons can be found to aid in the necessary but exceedingly tiresome experiments. This investigation has called for much modification of the ergographic apparatus formerly employed here and elsewhere, and it finally proved necessary to design an entirely novel form of the instrument. Many students have kindly aided by submitting very patiently to the irksome demands of the experiment. Much more work will be required for any final conclusions.

Miss Dimon worked on various chemical questions in the laboratory during the first and for a part of the second semester, that is up to the time when she took charge of the laboratory supervision. It was her intention to examine the synthetic power of the kidney, and the laboratory work was largely in anticipation of this purpose and a preliminary to it. An unexpected difficulty, however, was met with in obtaining fresh material from the slaughter house under conditions such as to make the experiments possible, and it was finally necessary to abandon the research.

Miss MacDonald has worked in the laboratory during a portion of the second semester. Her work was done with much care, but calls for no special comment because it consisted only of the ordinary experiments on the elasticity of muscles, and these were undertaken merely to give Miss MacDonald familiarity with the appliances and with actual practice of the graphic method.

During the second semester Miss Fry worked with great perseverance and much skill, making a study of the behaviour

of the milk curdling ferment under certain experimental conditions calculated to throw light upon the action of this peculiar ferment.

The fact ought also to be mentioned that Miss Charlotte B. Mitchell has voluntarily given a considerable portion of her time in the second semester to aiding Dr. Warren in carrying on experiments with the ergograph, and has been most helpful in these investigations. This is a personal service to the laboratory not recorded as a part of Miss Mitchell's academic work and deserves to be noted here.

The work done by Miss Peebles on the regeneration of hydra (mentioned in the Report for 1897-98) has been put into print. It appeared in the *Zoological Bulletin*, Vol. II, in the autumn of 1898 with the title, "The Effect of Temperature on the Regeneration of Hydra.

The workshop continues to be in every way and at all times a most important and helpful adjunct of the laboratory. Without it the work would be hampered at every step and considerable expenditure of time and money would be needed to obtain the apparatus constantly required and used for demonstration and experiment. Merely as an aid in caring for the appliances and making inevitable repairs, the shop is worth all its costs.

Dr. Morgan calls attention to the need of an increased appropriation for books and periodicals, and Dr. Warren states that the library of the department is constantly falling behind. The books on physiological subjects are even more deficient than on other topics. A considerable amount of money should be expended in order to make the supply of books in any way adequate to the demand which may properly be made upon them. Dr. Morgan also mentions the need of diagrams, which has made some of the work, especially in the new courses, cruder than is necessary. The museum, as pointed out in previous reports, is in such a deplorable condition that it is not presentable to visitors, and is of little use to the department. The difficulty of the greenhouse has, it is hoped, at last been cured by placing snow-boards on the roof of Dalton Hall above the greenhouse.

The graduate students have again gained much advantage from the investigators' room at Woods Holl; they have not only collected material for future work, but have profited by coming into contact with students and instructors from other institutions.

During the first semester Dr. Morgan gave a post-major course in the Comparative Anatomy of the Mollusca and Echinodermata, and during the second semester a course in Cytology. The students did good work in both these courses. As the post-major courses consist mainly of laboratory work, they make a great demand on the time of the instructor. If it were possible to have another assistant in the laboratory, Dr. Morgan could profitably add another hour a week of lectures.

The major course in Zoology was given again as in previous years; the time allotted to it is too short for the ground it should cover. Miss Lilian Vaughan Sampson, as a volunteer demonstrator, did much to make the course a success, and the department is greatly indebted to her for her able and generous assistance. Dr. Warren conducted the physiological part of the major course in the usual manner. Five students attended during the first semester and four during the second. One of these was a graduate student who was directed to take this course in order to make up a deficiency in preliminary training in anticipation of her candidacy for the doctor's degree.

After some consideration it has been decided to modify the instruction of the major course by lessening the amount of laboratory time given to questions of a chemical character and also lessening the time given to these subjects in the lectures. It is proposed to add a post-major course (of one or two hours with laboratory work) for topics belonging to physiological chemistry, and an announcement of this character has already been made in the program.

*Report of the Director of the Gymnastics.*

*To the President: Madam,*

During the year 1898-99, two hundred and fifty-seven students have worked in this department. Of this number two hundred and forty-one have taken the regular gymnasium work and the required out-of-door exercise; three left the college; and thirteen, owing to inabilities of various kinds, were not allowed to come to the class drill, but were given the work best suited to them. This, in some instances, consisted of special exercises in the gymnasium, in others of prescribed out-of-door exercise, and in still others of a combination of gymnastics and out-of-door work. It is a pleasure to report some improvement in almost all of these cases; and in a few the improvement in general health has been most gratifying. The regular required work consisted of both out-of-door exercise and work in the gymnasium. In out-of-door exercise the student was allowed to choose between basket-ball, golf, tennis, skating, walking, bicycling, riding, and driving, but was required to take a prescribed amount of the exercise chosen. The gymnasium work consisted mainly of class work. During the semester ending January 30 the drills were one hour long, and each student was required to drill once a week. During the second semester the period was divided and each student was required to come to the gymnasium two half-hours a week, because it was felt that the one-hour period had been too long for some of the students, and that what was learned in one lesson seemed to have been forgotten before the next.

The work taken up in the gymnastic classes has had more of a recreative than of an educational character. Some attempt at educational gymnastics was made, but the time of day set apart for the work, the infrequency of the drills and the ungraded condition of the classes made such work very unsatisfactory. A careful grading of the lower classes would seem to be a necessity.

Work began in the gymnasium on November 1st, 1898, and the last class was held on April 20th, 1899. Class work was given in the afternoon, while the evenings were devoted to individual work, special instruction in club-swinging, apparatus work, fencing, indoor athletic and corrective work. During this year for the first time out-of-door exercise, instead of being left to the option of the student, was required up to the beginning of the May collegiate examinations.

The usual physical examinations were made in the autumn during the month of October and in the spring during May. The improvement shown by a comparison of the results of these measurements is gratifying. Certain of the measurements are given below, these being selected because they are not so much affected as are the others by a gain or loss in adipose tissue; also because they are considered of the greatest importance.

*Table showing the number of students in each class that gained, that showed no variation, and that lost during the college year.*

		Inflation of Chest.	Inflation of Ninth Rib.	Depth of Chest.	Lung Capacity.	Strength of Back.	Strength of Legs.	Strength of Chest.
Class 1899	Gained . . . . .	31	36	19	23	30	23	45
	No variation.	6	3	10	7	9	10	0
	Lost . . . . .	9	7	17	13	7	13	1
Class 1900	Gained . . . . .	36	36	22	34	37	28	49
	No variation.	10	8	15	2	7	6	1
	Lost . . . . .	4	6	13	14	6	16	0
Class 1901	Gained . . . . .	40	54	33	49	68	44	74
	No variation.	9	8	22	8	5	7	0
	Lost . . . . .	26	13	20	18	2	24	1
Class 1902	Gained . . . . .	55	59	42	58	58	51	69
	No variation.	5	5	23	6	8	3	2
	Lost . . . . .	13	10	9	10	8	20	3



*Table comparing averages of measurements taken at the beginning of the college year with those taken at its close.*

*Class of 1899.*

	Inflation of Chest.	Inflation of Ninth Rib.	Lung Capacity.	Total Strength.
	cm.	cm.	c. c.	kg.
Averages of October, 1898.	5.11	4.85	167.76	233.73
“ “ May, 1899...	5.78	5.91	175.27	254.25
Increase.....	.67	1.06	7.51	20.52

*Class of 1900.*

Averages of October, 1898.	5.11	5.35	178.96	242.76
“ “ May, 1899...	6.38	6.43	181.48	269.57
Increase.....	1.27	1.08	2.52	26.81

*Class of 1901.*

Averages of October, 1898.	5.03	5.13	175.57	238.02
“ “ May, 1899...	5.46	6.10	179.80	271.86
Increase.....	.43	.97	4.23	33.84

*Class of 1902.*

Averages of October, 1898.	4.48	4.53	167.62	210.82
“ “ May, 1899...	5.89	5.89	190.84	249.81
Increase.....	1.41	1.36	23.22	38.99

These tables show at a glance that there has been a gain in every instance and that, as would be expected, the greatest gain has been in the Freshman Class.

The five highest total strength tests according to the May measurements are as follows:

547	kilograms,	member	of	class	of	1901
456.5	"	"	"	"	"	1901
436.5	"	"	"	"	"	1901
436.5	"	"	"	"	"	1900
411.5	"	"	"	"	"	1900
374	"	"	"	"	"	1899

The five greatest lung capacities are:

262	cubic centimetres,	member	of	class	of	1900
250	"	"	"	"	"	1901
230	"	"	"	"	"	1901
228	"	"	"	"	"	1901
226	"	"	"	"	"	1902

Such gains as improvement in carriage, increased grace and freedom of movement and a greater degree of interest in gymnastic work cannot be expressed numerically, yet it is in these points that, in the opinion of the Director, the greatest success of this year's work has consisted.

### *Athletics.*

It was the endeavor of the Department of Physical Training, in so far as this branch came within the scope of its influence, to have the athletics conducted in accordance with the official rules and regulations which govern athletics in other colleges. For some time before the record marking and also before field day careful attention was given to training students who had entered for events.

The record marking, or indoor athletic contest, took place in the gymnasium on March 14th. The required number of judges was appointed, and the following events were contested:

- Dash (15 yards).
- Standing high jump.
- High kick.
- Running high jump.

Vault.

Ring high jump.

Hurdles.

Standing broad jump, record broken by 1 ft. 2 in.

Rope climbing.

The running high jump, standing high jump, standing broad jump, ring jump and vaulting have, it is understood, not been conducted heretofore according to official rules. This being the case, the records made in these events on March 14th should stand as the college records.

On March 16th a swimming contest was held with the following events:

140 ft. swim.

Riding on boards—70 ft.

Obstacle race.

Swimming on the back.

Paddle and pulley race.

The field day held on April 21st, 1899, was the first in the history of the college. The contests took place on the athletic field. The events were as follows:

Hurdle race.

Walk—230 ft.

Dash—230 ft.

Putting the shot.

Throwing the base-ball.

Throwing the basket-ball.

Running broad jump.

Hop, step, and jump.

On April 24th the class games in basket-ball began. Only those students were allowed to play who, after having had their hearts carefully examined, were considered in condition to take part. The games were well attended and class spirit ran high, especially at the final games. The championship for the year was won by the class of 1900.

Respectfully submitted,

LOUISA SMITH,  
Director of Gymnasium.

## *Report of the Librarian.*

*To the President: Madam,*

Two thousand and seventy-nine volumes have been added to the library during the year, making the total collection thirty thousand four hundred and seventy-four. Of the additions, one thousand one hundred and seventy-eight volumes were purchased from the regular appropriations, nine hundred and one were gifts. A record-book for withdrawals was started during the year, in order to keep exact account of books worn out, replaced, sold as duplicates, and so forth. The number of entries in the book during the year has been sixty-eight.

During the year two thousand nine hundred and thirty-six cards were put in the catalogue. The revision undertaken the year before was almost entirely dropped, as no addition to the library staff was made to provide for it, while, on the other hand, the regular work of the library increased with the increasing collection and the greater number of readers.

The need for a library building has become very great. The crowding of books during the year has brought about even worse conditions for the readers in the library than those which existed last year; the difficulties of administration are growing greater every month; the waste of time on the part both of the staff and of users of the library is growing constantly more annoying. In order to give the college departments an efficient tool in the library, adequate provision should be made for its housing and for its technical work.

The gifts in money for the year were distributed as follows:

From Miss Garrett, received \$358, apportioned as follows: Pedagogy, \$50.00; Psychology, \$100.00; Modern German, \$25.00; Art, \$50.00; Archæology, \$60.00; and Reference Books, \$73.00.

From the James E. Rhoads memorial fund the department of Semitic Literature received \$97.29.

From Miss McLean's gift the department of Biology received \$5.00; and that of Chemistry, \$5.00.

The class of '99 gave \$96.00 for the purchase of books on music.

\$17.96 was collected from the class in General English for reference books in English to be kept in the halls of residence.

In addition to the gifts of money there have been the following gifts of books and periodicals, which are gratefully acknowledged:

Alabama—Geological Survey: Iron making in Alabama, ed. 2.

American Jewish Historical Association. Publications.

Professor C. M. Andrews: Andrews, Historical development of modern Europe, Vol. 2, 1898.

Association of Collegiate Alumnæ. Publications.

Mr. W. J. Baldwin: One roll of cartridge paper for covering pamphlets.

Professor G. A. Barton: American journal of theology, Vol. 3, No. 1; Jastrow, Religion of Babylonia and Assyria.

Mr. A. L. Bondurant: Bondurant, Sherwood Bonner.

Mlle. Louise de Bonneville: Gray, Manual of botany; Semmonds, Animal products.

Boston, Charity Organization Society: Report, 1898.

Brown University: Contributions from the anatomical laboratory.

Bryson Library, Teachers' College, New York: Catalogue of the Ellen Waters Avery collection of books.

Carnegie Library of Pittsburgh: Third annual report, 1899.

Chicago, Educational Committee: Report, 1898.

College Settlements Association: Annual report, Vol. 9; five pamphlets on college settlements.

Mr. Howard Comfort: Metcalfe, the Englishman and the Scandinavian; Smith, Sacred annals, 2 vols. (The Hebrew people); Stanley, Sermons and essays; Stephens, Life of St. Chrysostom.

Cornell University: Koch, Catalogue of the Dante collection, Part 1.

Mr. Whitman Cross: Cross, An analcite-basalt from Colorado; Cross, Igneous rocks of the Leucite Hills and Pilot Butte, Wyoming; Cross, Geological versus the petrographical classification of igneous rocks.

Dante Society of Cambridge: Annual reports, Vols. 14-16.

Mr. C. M. Depew: Depew, Autumnal speeches in 1898; Depew, Birthday addresses, 1892-99; Depew, Life and later speeches; Depew, Orations and after-dinner speeches; Depew, Speech at Congress of railway employees, 1899.

Mr. H. L. Everett: Anon., Historic churches of America, Vols. 15 and 18.

Mr. A. R. Foote: Foote, Power of municipalities, 1898; Right to property in an idea, 1898.

Mr. A. B. Franklin: Franklin, Light of reason.

Finland, Commission géologique: Bulletin, No. 8.

Mrs. B. B. Glenney: Santayana, Platonism in the Italian poets

Graduate Club: Handbook, Vol. 7, 1899.

M. A. Hasse: Haase, Syntaxe française du 17<sup>e</sup> siècle.

Mr. Sadakichi Hartmann: Hartmann, Buddha, a drama in twelve scenes.

Helena Public Library: Bulletin, Vol. 20-21.

Miss G. L. Heritage: First race of the kings of France.

Mr. A. B. and Mrs. W. S. Heywood: Ballou, Autobiography; Ballou, History of the Hopedale community.

Iowa Geological Survey: Annual report, Vol. 8, 1897, with accompanying papers.

Johns Hopkins University: Studies from the biological laboratory, Vol. 3, Nos. 1, 3, 5-6, 8-9, Vol. 4, No. 7.

Miss F. B. Kane: Philadelphia Press almanac, 1898.

Kansas University: Kansas university quarterly, Vols. 1-8.

Professor Gonzalez Lodge: Gehlen, De Juvenale Vergilli imitatore, 1886; Hasper, De compositione Militis gloriosi commentatis; Le Breton, Quelques observations sur l'Aulularia de Plauti; Leo, Die Plautinischen cantica und die hel-

lonistische lyrik, 1897; Schwartz, *De Juvenale Horatii imitatore*, 1882; Streifinger, *Der stil des satirikers Juvenalis*.

Judge J. G. Maguire: American Historical Association, Annual report, 1894-96, 4 Vols.; Smithsonian Institution, Annual report of the board of regents, 1896; U. S. Congress, Proceedings upon acceptance of the statues of John Stark and Daniel Webster; U. S. Bureau of education, Report of the Commissioner of education, 1888-1889, 2 Vols., 1891-92, 2 Vols., 1897, 2 Vols.; U. S. Bureau of ethnology, Fifteenth annual report, 1893-94; U. S. Pan-American medical congress, Transactions of the first congress, 1893, 3 Vols.; U. S. Weather bureau, Report of the chief, 1896-97.

Maimonides Free Library: English fiction list.

Mr. Theodore Marburg: Marburg, Venezuelan dispute; Marburg, War with Spain.

Professor Henri Marion: Marion, *Verbe en quatre tableaux synoptiques*.

Maryland Geological Survey: Survey, Vol. 2, 1898.

Massachusetts: Census of Massachusetts, 1895, 3 Vols.; Reports on statistics of labor, 1894-96, 3 Vols.; Reports on annual statistics of manufactures for the years 1886-89, 1894-97, 7 Vols.

Miss A. M. Meade: Reye, *Geometrie der lage*, Vol. 1.

Michigan Geological Survey: Survey, Vol. 6, 1893-97.

Michigan Schoolmasters' Club: Proceedings, 1898.

Michigan State Board of Corrections and Charities: Fourteenth biennial report, 1897-98.

Michigan State Board of Health: Publications.

Missouri Botanical Garden: Tenth report, 1899.

Professor T. H. Morgan: Mall, *Developments of the internal mammary; Mall, Lobule of the spleen*.

Miss G. L. Morrill: *Speculum*, G. de Warewyke.

Dr. W. A. Neilson: Selections from the poems of Robert Burns by John G. Dow, 1898; Shakespeare, *Macbeth*, edited by Boynton and Neilson, 1899.

New York (State): Charities Association, Twenty-sixth annual report, 1898; Geologist, Fifteenth annual report, 1895; Museum, Bulletin, Vol. 5, Nos. 19-23; Tompkins, *Military papers, Second war with Great Britain series*, Vol. 1.

Oregon, University of: Bulletin of the historical series, Vol. 1, No. 1.

Pennsylvania State College of Mines: Clays and clay industries of Pennsylvania.

Mr. A. T. Perry: Perry, Preëminence of the Bible as a book.

Perry, Mason and Co.: Gladstone, Arthur Henry Hallam.

Mr. W. R. and Mr. J. P. Peters: McClure, Diary 1748-1820.

Philadelphia Commercial Museum: Publications.

Philadelphia Free Library: Bulletin.

Philadelphia Prison Society: Reports.

Mr. R. M. Pierce: Problems of number and measure, 1898.

Press Publishing Co., Lincoln, Nebraska: Amerikanische poesie.

Public Ledger: Almanac, 1899.

Red Cross Society: American national red cross relief committee, Reports, 1898-99.

Miss Constance Robinson: Fortnightly Philistine, Vols. 1 and 2, eleven numbers.

Royal Society of Canada: Proceedings and transactions, Series 2, Vol. 3, 1897.

President J. G. Schurman: Schurman, Generation of Cornell, 1898.

Mr. J. C. Shedd: Shedd, Interferometer study of radiations in a magnetic field.

Mr. Marcus Simpson: Simpson, Eine vergleichung der Wielandschen Shakespeare.

Smithsonian Institution: Proceedings, Vol. 20; Regents, Annual report, July, 1896; Studies, Psychological series, No. 1, Biological series, No. 1.

Professor H. W. Smyth: Daal, Joannis Agricola islebiensis apophthegmata; Drachmann, Catuls' digtning; Drachmann, Guderne hos Vergil; Gaussen, Die prosa in Shakesperes dramen, 1te teil, anwendung; Koenigliche norske Fredriks universitet, Program 1st semester, 1887; Sachs, Der partikeln der Mischne; Steuerson, Udsigt over den Romerske



satires forskjellige arter ogderes oprindelse; Steuerson, Catuls' digtning; Torp, Die flexion des pali in ihrem verhaeltniss zum Sanskrit; Weinal,  $\pi \omega$  D und seine derivate.

Sound Currency Committee: Aldredge, Speech on the free coinage of silver; Carlisle, Speeches on the free coinage of silver; Schurz, Speech on the free coinage of silver; Sound currency, Vol. 1, No. 5, Present day problems; Sound currency, 1895 and 1896; two broadsides, sixty pamphlets and forty-six leaflets on the silver question; twenty-two pamphlets on the tariff question.

Mr. T. H. Speakman: Speakman, Reply to the epistle of the yearly meeting of orthodox friends, ed. 2, 2 copies.

Sullivan and Cromwell: Abbott, New Panama canal; Abbott, Present status of the Panama canal; Hunter, American isthmus and inter-oceanic canal; New Panama canal, 1898.

Mr. M. I. Swift: Swift, Anti-imperialism.

The Misses Talcott: Missionary herald, 86 Vols.

Text-book Association, Philadelphia: Sharpless, Quaker experiment in government.

President Thomas: Gerber, Goethe institutions at Weimar, No. 23; Goebel, Beitræge zur erklaerung von Goethe's Faust, No. 21; Johnston, Historical syntax of the atomic personal pronouns in Italian; Americana Germanica, Vol. 2, No. 3; three pamphlets.

United Polish Press and Organizations: Cause of Poland.

United States Government: Agriculture, Department of, Publications; Civil Service Commission, Report 15, 1897-98; Education, Bureau of, Art and industry; Geological Survey, Geologic atlas of the United States, folios 38 and 44-47; Navy Department, Official record of the Union and Confederate armies in the war of the rebellion, series 1, Vol. 8; Richardson, Compilation of the messages and papers of the presidents,

Vedanta Society: Voice from the Himalayas. 1789-1897, Vols. 8.

Volta Bureau, Washington, D. C.: three pamphlets, two leaflets.

Hon. J. H. Walker: Walker, Ten years of treasury, banking, and currency reform.

Washington University: Civil engineering, Department of, St. Louis, Higher industrial and commercial education as an essential condition of our future material prospect.

Mr. Sidney Webb: Webb, Fabian tracts, Nos. 69 and 74.

Miss H. I. Whiton: Whiton, Co-ordinate and subordinate conjunctions in Chaucer's Troilus and Criseyde.

Wisconsin, University of: Lincoln, Electrical conductivity of non-aqueous solutions; Urdahl, Fee system in the United States.

The list of periodicals given is as follows, the gift being from the publisher unless otherwise stated:

Advocate of peace; American economist; Baptist missionary magazine (gift of Bryn Mawr students); La bibliofilia; Book reviews; Bookman; Bibliographical contributions of Bowdoin college library; Bulletin of bibliography; Bulletin of the Lowell, Mass., city library; Bulletin of the Philadelphia mercantile library; Bulletin of the New York public library; Columbia University quarterly; Deaconess' advocate; Friends' missionary advocate; Hartford seminary record; Helena public library bulletin; Hochschul-nachrichten; Johns Hopkins university circulars; Journal of American folk-lore (gift of Miss C. E. Bemeson); Kansas university quarterly; Lantern; Library record; Literary era; Literary life; Literary news; Literary world; Money; Nature notes; New York state library bulletin; Ohio bulletin of charities and correction; University of Pennsylvania bulletin; Philadelphia prison society journal; Pratt institute free library bulletin; Sound currency; Southern workman; Sunday school times; Technology review; University of Chicago record; Washington book chronicle; University of Wisconsin bulletins in economics, engineering, history, philosophy, and science; Wilson bulletin; Woman's journal.

Again we wish to tender our hearty thanks to the libraries that have lent us books with such unfailing courtesy, and to those members of our own faculty who have generously placed their own books at the disposal of the students.

Respectfully submitted,

ISABEL ELY LORD,  
Librarian.







